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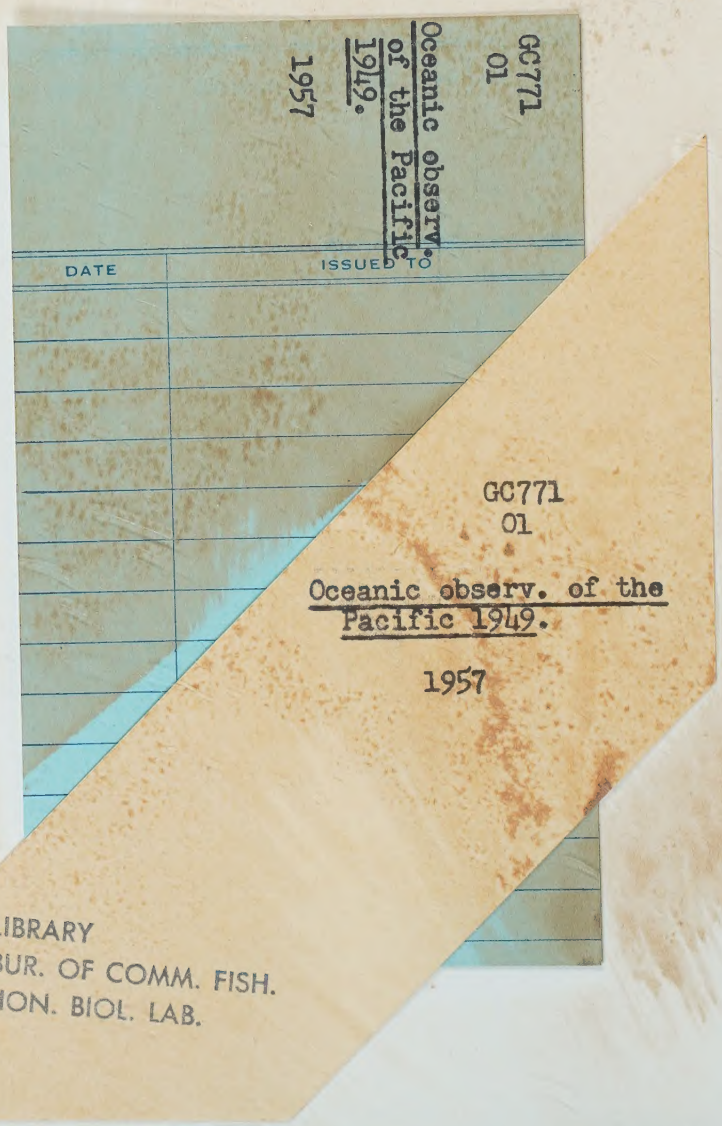

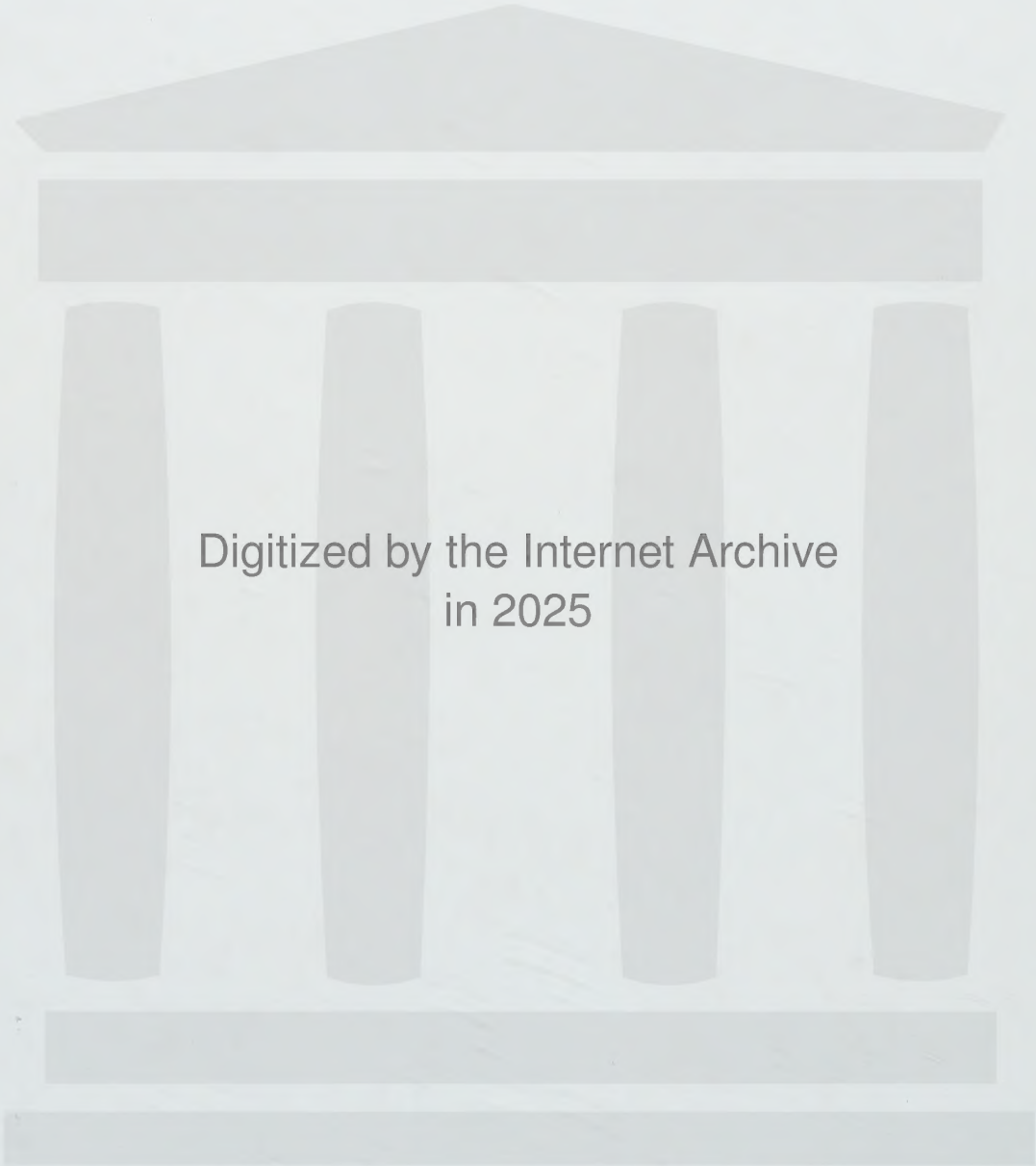

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Oceanic Observations of the Pacific

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OCEANIC OBSERVATIONS OF THE PACIFIC

1949

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OCEANIC OBSERVATIONS OF THE PACIFIC: 1949

SCRIPPS INSTITUTION OF OCEANOGRAPHY OF THE
UNIVERSITY OF CALIFORNIA, LA JOLLA, CALIFORNIA

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Preface

After the close of World War II there was a great increase in oceanographic activity in the United States, resulting in part from the interest and support of the United States Navy as well as from the inclusion of oceanographic programs in large-scale fisheries research projects. Consequently there has been a steady accumulation of oceanographic data. Since there has been no provision for the regular publication of such material from the Pacific area, most of the postwar data and some valuable prewar material remain in manuscript or mimeographed form, not readily available to oceanographers.

Publication of "Oceanic Observations of the Pacific" is intended to fill this gap. It is a medium for publication of oceanographic data collected in the Pacific Ocean and its adjacent seas by the contributing agencies. At the present time these agencies are: the Scripps Institution of Oceanography of the University of California (La Jolla, California); the Department of Oceanography of the University of Washington (Seattle, Washington); the United States Navy Electronics Laboratory (San Diego, California); and the Pacific Oceanic Fishery Investigations of the United States Fish and Wildlife Service (Honolulu, Territory of Hawaii). It is hoped that other agencies engaged in oceanography in the Pacific area will utilize this serial for publication.

The present volume contains observations made in 1949. Later, a volume will be issued that will contain hitherto unpublished observations made prior to 1949 plus a selective bibliography of earlier sources of data from the Pacific. Subsequent volumes will contain observations made in each succeeding year and will appear at irregular intervals as they are completed.

For each station, values of temperature, salinity, oxygen, phosphate, or other measured concentrations are tabulated at observed and at standard depths. Computed values of density, specific volume anomaly and geopotential anomaly are tabulated at standard depths. Introductory material includes charts of station positions and positions of bathythermograph observations, a brief discussion of special techniques used in making measurements, and a list of published papers pertaining to the 1949 cruises.

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Description of Observations

SCRIPPS INSTITUTION OF OCEANOGRAPHY

In 1948, under the sponsorship of the Marine Research Committee of the State of California, a large-scale fisheries investigation, known as the California Cooperative Sardine Research Program (in 1953 renamed California Cooperative Oceanic Fisheries Investigations, hereafter abbreviated as CCOFI), was initiated. Cooperating in this program were the California Academy of Sciences, California Division of Fish and Game, South Pacific Fishery Investigations of the United States Fish and Wildlife Service, and the Scripps Institution of Oceanography of the University of California. The character of this research and its findings are described in progress reports (California 1950, 1952, 1953) and by Ahlstrom et al. (1950) and McHugh and Ahlstrom (1951).

In 1949 the first nine oceanographic cruises of this program were made between March and November with two or three vessels on each cruise. Ships of the South Pacific Fishery Investigations and the California Department of Fish and Game participated in obtaining the data; all oceanographic data were processed at the Scripps Institution of Oceanography. The positions of all stations occupied at least once in 1949 are shown in Chart 1. In addition to the measurements described below bathythermograph observations were made on each station and at intervals between stations. Standard oblique net tows with a one-meter net were taken on each station. Concentrations of Pacific sardine eggs and larvae, and zooplankton volumes have been reported by Ahlstrom (1954) and the staff of South Pacific Fishery Investigations (1954). Counts of the numbers of individuals of certain species within several groups of the zooplankton are underway at the Scripps Institution.

On most stations hydrographic casts were made to approximately 1000 m depth. On about 20 stations of cruises 4909 and 4910 observations were made to approximately 3000 m depth. Temperatures were measured with paired protected reversing thermometers, and unprotected reversing thermometers were used on every water bottle below 150 m in order to determine the depth of reversal. Water samples were analysed ashore for salinity by the Knudsen method and aboard ship for dissolved oxygen by the Winkler method. Phosphate analyses were made aboard ship using the absorptiometric method and equipment described by Wooster and Rakestraw (1951), Wooster, Carritt and Isaacs (1951) and Snodgrass, Carritt and Wooster (1954). Since standard curves were run with sea water no correction for salt error was necessary.

The methods used in the processing of data and in the computation of density, specific volume anomaly and geopotential anomaly differ in no significant way from those described by LaFond (1951). In computing geopotential anomaly, the absolute pressure in decibars was assumed equal to the geometric depth in meters.

All reversing thermometers were calibrated prior to use, and pressure factors of unprotected thermometers were determined empirically in the field. It is estimated that temperatures reported here are accurate to ± 0.03 C. Owing to the use of unsatisfactory salinity bottles on some cruises, salinity values for those cruises are believed to be about 0.015 ‰ too high for each month of storage prior to analysis. Footnotes at the beginning of appropriate cruises give the estimated magnitude of this error in salinity and salinity-dependent parameters. When any observations are considered of questionable value, they are omitted from the tables.

Using data collected during the 1949 cruises, McHugh has studied the distribution of albatrosses (1950) and of the diatom Ethmodiscus rex (1954). Studies of the plankton collections have included work on tunicates (Berner, 1954), euphausiids (Brinton, 1955; Boden, Johnson and Brinton, 1955) and heteropod molluscs (Dales, 1953 a and b). Mao (1951) has computed eddy diffusivity coefficients, Defant (1950 a and b) has studied internal waves of tidal period, and Emery (1954) has examined the transparency of coastal waters.

UNITED STATES NAVY ELECTRONICS LABORATORY

During 1949, two oceanographic cruises were made aboard USS Serrano. Their primary purpose was to determine sound velocity distributions in subarctic waters (Cruise II) and in tropical waters (Cruise III), for use in evaluating the SOFAR air-sea rescue network. On each cruise oceanographic observations were accompanied by an acoustic experimental program. Acoustic results of the cruises have been reported by SOFAR Research Group (1950), Condron (1951) and Anderson (1951).

Bathythermograph observations were made at frequent intervals (97 on Cruise II, 248 on Cruise III). The positions of stations are shown on Chart 2. In general, observations were taken to about 1200 m on Cruise II, 1500 m on Cruise III. Since information on sound velocity distribution was desired, water bottles were not placed as close together in the surface layers as is usually done, but bottles were spaced at 50-m intervals in the vicinity of the deep sound channel (axis about 650 m).

Recently calibrated reversing thermometers were used in temperature and depth measurements, and it is estimated that temperatures are accurate to ± 0.03 C. Salinities were determined by Knudsen's method and are estimated to be accurate to ± 0.04‰. On Cruise III, dissolved oxygen was determined on board by the Winkler method and inorganic phosphate on board by the absorptiometric method referenced above (but without temperature correction).

PACIFIC OCEANIC FISHERY INVESTIGATIONS

In 1947 the United States Congress authorized the exploration, investigation, and development of the high seas fisheries of the territories and island possessions of the United States in the tropical and subtropical Pacific Ocean and intervening seas. A unit called the Pacific Oceanic Fishery Investigations was set up within the United States Fish and Wildlife Service to carry out this program (Sette, 1949). The major field work of this investigation began in 1950.

The only cruise in 1949, Cruise 1 of the Hugh M. Smith, was made in the lee waters of the island of Hawaii, and served as a shakedown cruise for the testing of biological and other oceanographic equipment.

Oceanographic stations consisted of casts to a depth of about 1200 m using 13 water bottles. Reversing thermometers were used for determinations of temperature and depth. Oxygen concentrations were determined on board by the Winkler method; salinity concentrations were determined ashore by the Knudsen method. Bathythermograph observations were made on each station and at various positions between stations.

Values at standard depths were determined by the method described by Montgomery (1954). A detailed description of the cruise and results has been prepared by McGary (1955).

BATHYTHERMOGRAPH OBSERVATIONS

The development of the bathythermograph (Spilhaus, 1938, 1940) has made possible the rapid accumulation of temperature data from the surface layers of the ocean. All bathythermograph slides made by U. S. naval vessels in the Pacific and Indian Oceans are now processed at the U. S. Navy Hydrographic Office, and copies are deposited at the Scripps Institution of Oceanography. Other agencies collecting such data in this area are urged to send them for processing to the Hydrographic Office which will return photographic copies of the slides if desired.

Since the bathythermograph slide presents temperature as a continuous function of depth (450 or 900 ft depending on the instrument used) and because of the large number of such observations, it is not practicable to publish tabulations of bathythermograph data. The locations of all such observations made in the Pacific, Indian and Antarctic Oceans and deposited at Scripps Institution are shown in Charts 3 to 6.

Papers based in total or in part on Pacific bathythermograph observations through 1949 include La Fond (1949, 1954), La Fond and Pritchard (1952), Leipper and Anderson (1950), Pritchard and La Fond (1952), Robinson (1954) and Rudnick and Cochrane (1951).

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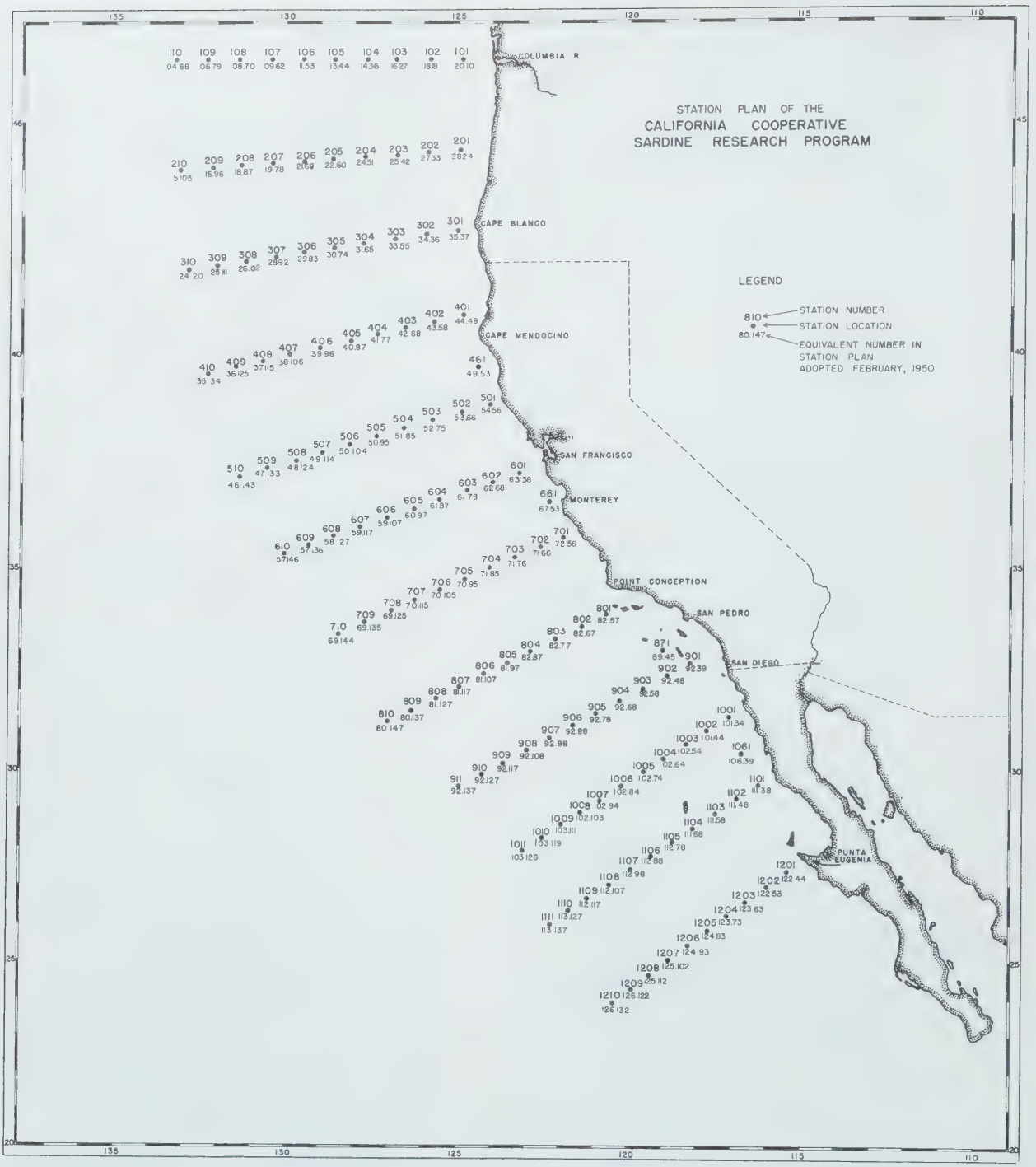

CHART 1. Station positions, California Cooperative Oceanic Fisheries Investigations, 1949.

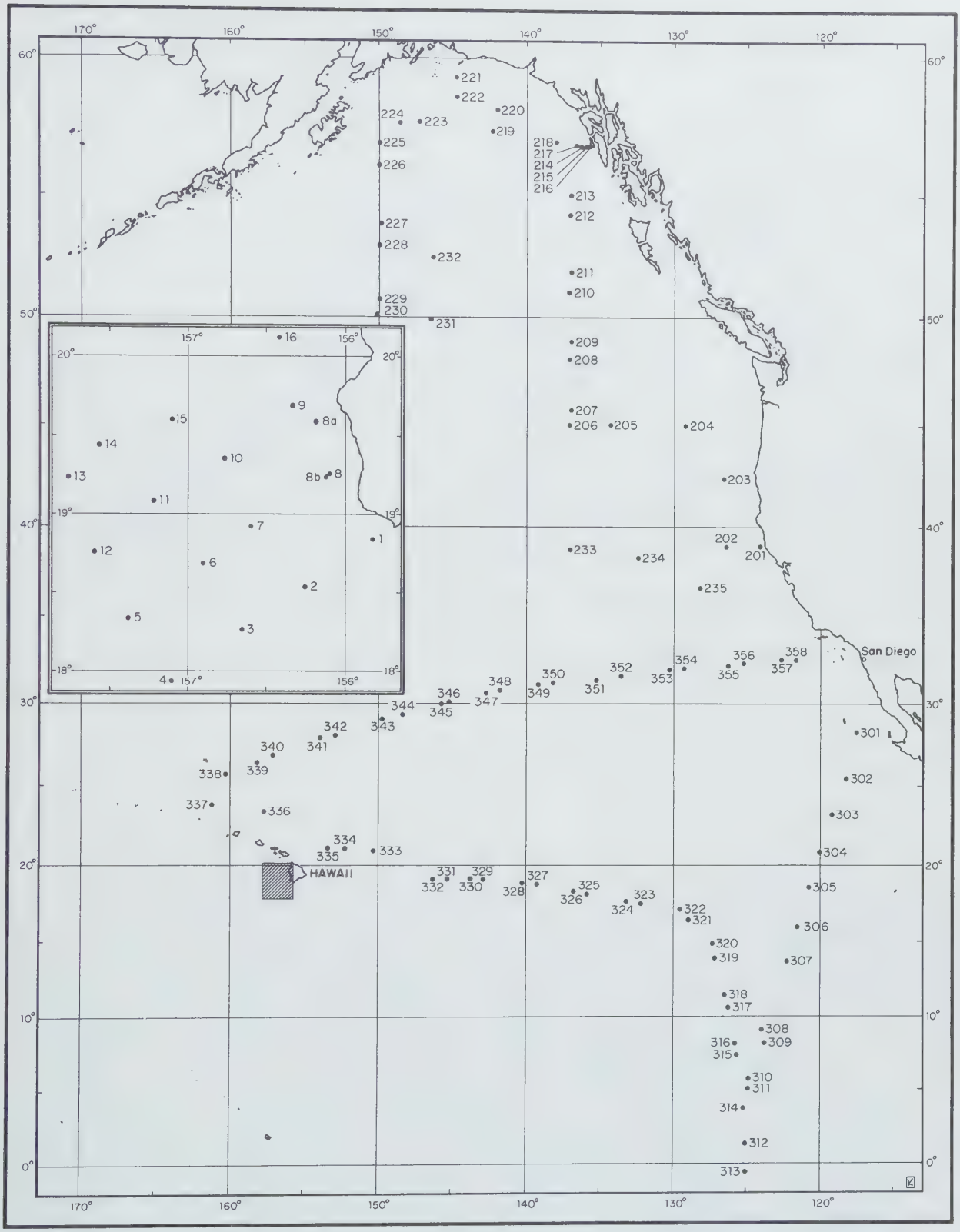

CHART 2. Station positions, U. S. Navy Electronics Laboratory, Pacific Oceanic Fishery Investigations (inset), 1949.

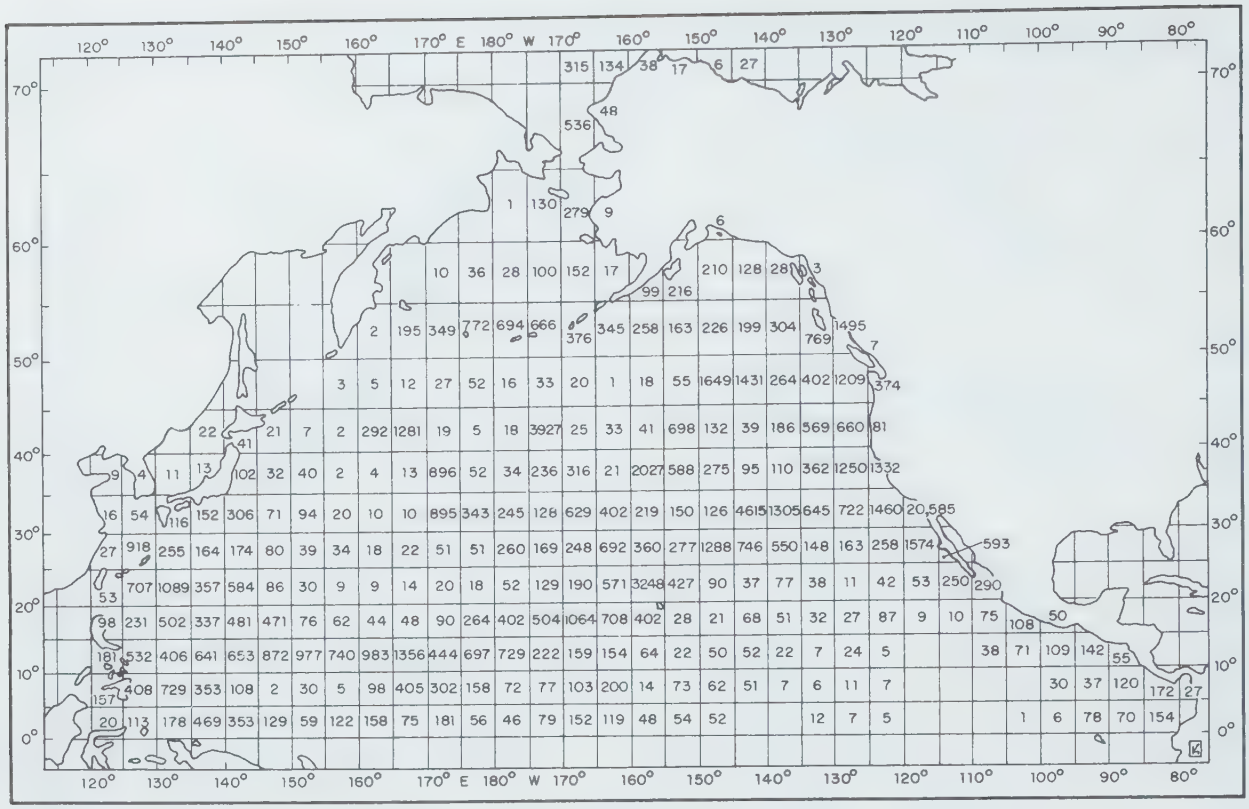

CHART 3. Bathythermograph observations, North Pacific, 1941 through 1949.

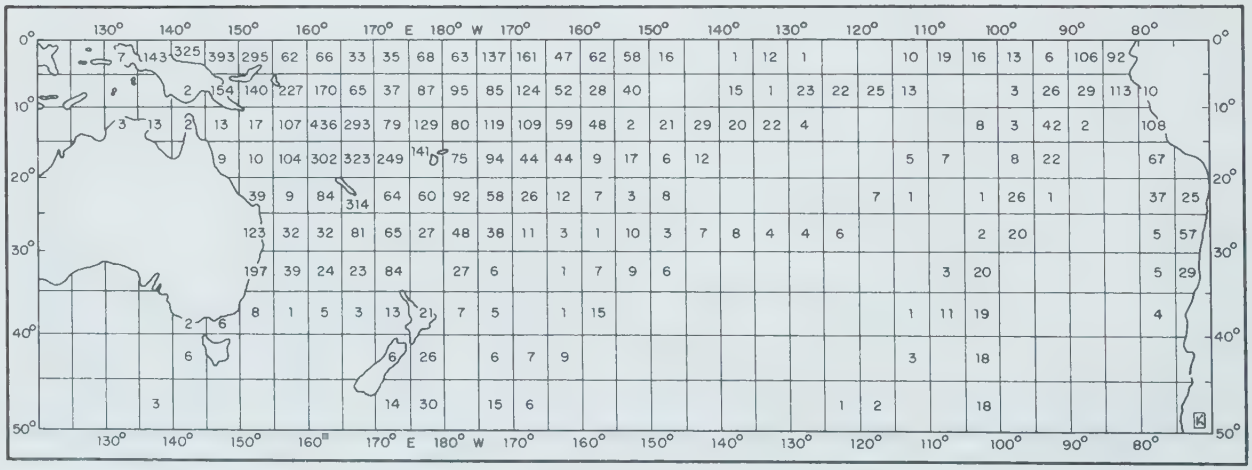

CHART 4. Bathythermograph observations, South Pacific, 1941 through 1949.

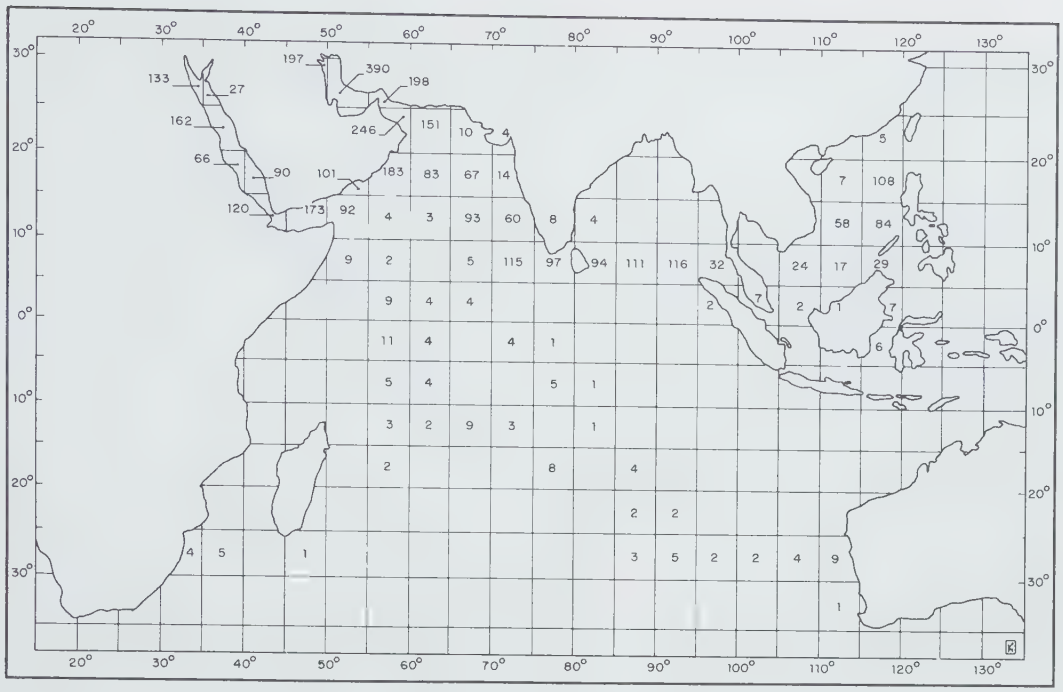

CHART 5. Bathythermograph observations, Indian Ocean, 1941 through 1949.

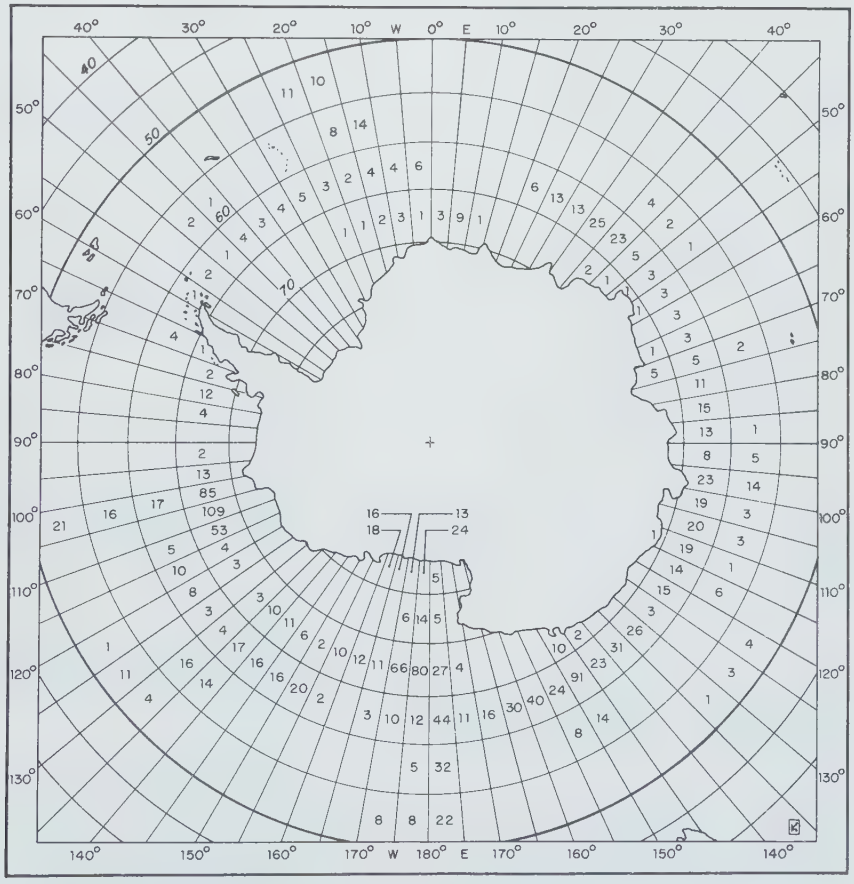

CHART 6. Bathythermograph observations, Antarctic Ocean, 1941 through 1949. Chart complete for latitudes greater than 50° South.

Explanation of Tables

SIDE RUNNING HEADS

Cruise-identifying information is shown in the margin near the top of the page. The first line is an abbreviation of the name of the organization responsible for the data. The second and other lines, if present, give the cruise identification. In the case of data collected on the California Cooperative Oceanic Research Program, for example, CCOFI 4903 signifies the March 1949 cruise of the program.

Individual station numbers are given in the margin opposite the station data. Station positions are shown in the appropriate station position charts.

HEADINGS OF GROUPS OF COLUMNS

OBSERVED: Corrected data at accepted depths of observation.

INTERPOLATED: Data at standard depths, interpolated from smooth distribution curves. The standard depths are those recommended by the International Association of Physical Oceanographers in 1936 (Assoc. d'Océanographie Physique, Procès Verbaux, No. 2, p. 59, 1937).

COMPUTED: The results of computations based, in general, on interpolated values.

COLUMN HEADINGS

Z Depth in meters at which observation was made or an interpolated value obtained.

T Temperature of water in degrees centigrade at observed or interpolated depths.

S Salinity of water in grams per kilogram (‰) at observed or interpolated depths.

O_2 Concentration of dissolved oxygen in milliliters per liter at observed or interpolated depths.

σ_t Sigma-t in grams per liter at interpolated depths. Sigma-t can be defined

$$\sigma_t = 1000 \ (\rho_{STO} - 1)$$

where ρ_{STO} is the density, in grams per cubic centimeter, of water of salinity S, temperature T and at standard atmospheric pressure.

δ Specific volume anomaly, in 10^{-5} cubic centimeters per gram (centiliters per metric ton) at interpolated depths. Specific volume anomaly is defined as the difference between the specific volume of the water at a specified depth and the specific volume of a standard water with salinity of 35 ‰ and temperature of 0 C at the same depth.

ΔD Geopotential anomaly, in dynamic meters, of the layer of water between the surface and the designated standard depth. Geopotential anomaly is the difference between the geopotential thickness of the observed layer and the geopotential thickness of a layer bounded by the same pressures but having standard temperature 0 C and salinity 35 ‰. The tabulated anomaly is determined from an aproximation of the integral

$$\Delta D = \int_0^{P_z} \delta \, dp$$

where p is pressure in decibars (assumed equal to depth in meters) and subscript z denotes the value at the bottom of the layer under consideration. Since geopotential thickness is the product of geometrical thickness and the acceleration of gravity, a dynamic meter is equal to 10^5 ergs per gram and is the change in geopotential over a vertical distance of approximately 1.02 m.

SUPPLEMENTARY STATION INFORMATION

Supplementary information about each station is to be found just above the tabulated data. This information includes name of ship, geographical location of station, date and time of observation, depth of water (in fathoms), a description of surface weather and sea state (for code used by CCOFI and NEL see U. S. Dept. of Commerce, 1941), wind direction and force (Beaufort scale), and wire angle. When there was more than one cast on a station, messenger times and wire angles are usually given for each cast in the order of shallow to deep casts.

NOTES ON THE TABULATION OF DATA

1. Observed temperatures obtained by thermograph or bucket thermometer are reported only to tenths of a degree. Reversing thermometer temperatures are reported to hundredths of a degree.

2. Missing values are indicated by a hyphen (-).

3. Extrapolated values and values interpolated between remote observations are entered within parentheses.

4. Data from separate casts on a station are separated in the tables.

5. The following symbols have been used where appropriate:

- p: pretrip (premature reversal of water bottle)
- r: value rejected in interpolation
- u: uncertain observed value

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OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	
CREST; March 1, 1949; 0934 GCT; 38°50'N, 124°05'W; sounding, missing; wind, 225°, force 5; weather, overcast; sea, high; wire angle, 40°.													501
0	10.5	33.44			0	10.5	33.44			25.68	232.5	0.000	
8	10.46	33.44			10	10.46	33.44			25.68	232.5	0.023	
19	10.45	33.42			20	10.45	33.42			25.66	234.1	0.047	
39	10.45	33.44			30	10.45	33.44			25.68	233.2	0.070	
58	10.06	33.42			50	10.25	33.42			25.70	231.5	0.116	
78	9.83	33.51			75	9.88	33.49			25.82	220.7	0.173	
117	9.50	33.64			100	9.65	33.58			25.92	211.0	0.227	
152	8.71	33.86			150	8.79	33.85			26.27	178.5	0.324	
221	8.45[a]	-			200	8.57	33.92			26.36	171.0	0.412	
285	7.96	33.98			250	8.26	33.97			26.45	163.6	0.495	
373	6.80	34.04			300	7.76	34.00			26.55	154.2	0.574	
598	5.30	34.16			400	6.58	34.06			26.76	135.6	0.729	
896	4.44	34.31			500	5.81	34.11			26.89	123.1	0.867	
					600	5.29	34.16			27.00	114.0	0.986	
					700	4.87	34.21			27.08	106.0	1.096	
					800	4.62	34.26			27.15	100.5	1.199	
					1000	(4.27)	(34.36)			(27.27)	(90.7)	(1.390)	
CREST; March 1, 1949; 2116 GCT; 38°35'N, 125°48'W; sounding, missing; wind, 160°, force 2; weather, fog; sea, rough; wire angle, 15°.													503
0	10.1	32.95			0	10.1	32.95			25.36	263.0	0.000	
10	9.89	32.94			10	9.89	32.94			25.38	260.5	0.026	
24	9.69	32.95			20	9.75	32.94			25.41	258.6	0.052	
47	9.06	33.24			30	9.54	32.99			25.48	252.2	0.078	
71	8.92	33.46			50	9.07	33.30			25.80	221.9	0.125	
94	8.37	33.60			75	8.85	33.49			25.98	205.0	0.179	
140	7.64	33.80			100	8.29	33.63			26.18	186.6	0.227	
189	6.98	33.93			150	7.48	33.84			26.46	160.5	0.314	
282	6.05	33.95			200	6.85	33.94			26.63	145.5	0.391	
379	5.60	34.00			250	6.36	33.95			26.70	138.7	0.462	
565	4.74	34.16			300	6.00	33.96			26.75	134.3	0.530	
840	3.99	34.34			400	5.49	34.02			26.86	125.1	0.660	
1203	3.14	34.43			500	5.04	34.09			26.97	115.1	0.780	
					600	4.66	34.19			27.09	104.1	0.890	
					700	4.34	34.27			27.19	95.4	0.990	
					800	4.08	34.32			27.26	89.6	1.082	
					1000	3.60	34.39			27.36	80.6	1.252	
CREST; March 2, 1949; 0355 GCT; 38°28.5'N, 126°40'W; sounding, missing; wind, 225°, force 2; weather, rain; sea, high; wire angle, 0°.													504
0	10.2	32.63			0	10.2	32.63			25.09	287.9	0.000	
10	10.05	32.66			10	10.05	32.66			25.14	283.7	0.029	
22	9.94	32.66			20	9.95	32.66			25.16	282.3	0.057	
38	9.87	32.68			30	9.90	32.67			25.17	281.1	0.085	
49	9.62	32.75			50	9.62	32.75			25.28	271.0	0.140	
55	9.90	32.66			75	9.62	32.78			25.30	269.6	0.208	
73	9.65	32.74			100	9.25	33.02			25.55	246.4	0.272	
99	9.23	33.12			150	8.40	33.49			26.05	199.5	0.384	
191	7.71	33.82			200	7.55	33.83			26.44	162.8	0.474	
290	6.47	33.93			250	6.89	33.89			26.58	149.9	0.553	
488	5.02	34.11			300	6.33	33.94			26.70	139.7	0.625	
789	4.14	34.16			400	5.53	34.03			26.86	124.6	0.757	
1134	3.35	34.45			500	4.96	34.12			27.01	111.8	0.875	
					600	4.55	34.15			27.07	105.8	0.984	
					700	4.30	34.15			27.10	103.8	1.089	
					800	4.14	34.16			27.13	102.0	1.192	
					1000	3.72	34.30			27.28	88.6	1.382	

a) Middle thermometer reading of 8.29° rejected.

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505

CREST; March 2, 1949; 1042 GCT; 38°20'N, 127°31'W; sounding, missing; wind, 180°, force 3; weather, overcast; sea, rough; wire angle, 42°.

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
0	10.4	32.68			0	10.4	32.68			25.12	285.1	0.000
8	10.22	32.70			10	10.27	32.70			25.14	284.2	0.029
19	10.14	32.66			20	10.14	32.66			25.12	285.1	0.057
40	9.97	-			30	10.07	32.67			25.14	283.5	0.085
62	9.42	32.79			50	9.72	32.74			25.25	273.7	0.141
84	9.27	33.10			75	9.32	32.86			25.42	259.0	0.208
127	8.56	33.55			100	8.98	33.21			25.76	226.7	0.268
164	8.18[a]	33.84			150	8.26	33.77			26.29	176.6	0.369
242	7.16	33.89			200	7.66	33.88			26.47	160.7	0.453
329	6.38	33.75r			250	7.10	33.89			26.55	153.0	0.532
492	5.14	34.00			300	6.62	33.91			26.64	145.6	0.606
739	4.21	34.29			400	5.81	33.94			26.76	134.7	0.747
1085	3.39	34.40			500	5.11	34.01			26.90	121.9	0.875
					600	4.68	34.13			27.04	108.8	0.990
					700	4.31	34.26			27.19	95.8	1.093
					800	4.02	34.32			27.26	89.0	1.185
					1000	3.57	34.38			27.36	81.0	1.355

506

CREST; March 2, 1949; 1711, 1756 GCT; 38°14'N, 128°22'W; sounding, missing; wind, 270°, force 4; weather, showers of snow and rain; sea, high; wire angle, 37°, 37°.

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
0	10.5	32.75			0	10.5	32.75			25.14	284.2	0.000
8	10.52	32.75			10	10.50	32.75			25.14	284.4	0.028
19	10.48	32.74			20	10.45	32.74			25.14	283.9	0.057
37	10.20	-			30	10.34	32.74			25.15	283.8	0.085
55	9.70	32.74			50	9.86	32.74			25.23	275.6	0.141
71	9.29	32.74			75	9.28	32.75			25.34	266.4	0.209
100	9.35r	33.42			100	8.81	33.42			25.93	209.9	0.268
128	8.24	33.62			150	7.98	33.68			26.27	179.0	0.366
191	7.50	33.78			200	7.39	33.81			26.45	162.1	0.451
255	6.94	33.95			250	6.91	33.94			26.62	146.7	0.528
380	5.86	34.00			300	6.48	33.99			26.71	138.0	0.599
					400	5.72	34.01			26.83	128.2	0.732
755	4.10	34.25			500	5.19	34.05			26.92	119.7	0.856
					600	4.70	34.12			27.03	109.8	0.971
					700	4.29	34.20			27.15	99.7	1.016

507

CREST; March 3, 1949; 0036 GCT; 37°50'N, 129°03'W; sounding, missing; wind, 250°, force 4; weather, cloudy; sea, high; wire angle, 21°.

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
0	11.6	32.88			0	11.6	32.88			25.03	293.7	0.000
9	11.69	32.86			10	11.63	32.86			25.02	295.3	0.030
23	11.64	32.86			20	11.68	32.86			25.01	296.4	0.059
47	11.64	32.88			30	11.65	32.86			25.02	295.9	0.089
71	11.36	32.90			50	11.61	32.88			25.04	294.4	0.148
94	10.20	33.10			75	11.24	32.91			25.13	286.4	0.220
141	8.29	33.58			100	9.41	33.18			25.65	236.8	0.286
187	7.65	33.80			150	8.14	33.64			26.21	184.6	0.391
279	6.72	33.93			200	7.50	33.83			26.45	162.2	0.478
377	5.96	33.98			250	7.01	33.90			26.58	150.8	0.556
568	4.68	34.13			300	6.53	33.94			26.67	142.3	0.629
846	3.78	34.31			400	5.73	34.00			26.81	129.5	0.765
1352	2.78	34.42			500	5.05	34.08			26.96	115.9	0.888
					600	4.53	34.15			27.08	105.5	0.999
					700	4.22	34.22			27.17	97.7	1.100
					800	3.99	34.28			27.24	91.5	1.195
					1000	3.50	34.36			27.35	81.7	1.368

a) Left thermometer reading of 8.46° rejected.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	601
m	°C	‰	ml/L	µg at/L	m	°C	‰	ml/L	µg at/L	g/L	10^{-5} cm^3/g	cm	
0	11.0	33.28	0	11.0	33.28				25.44	233.4	0.000		
10	10.89	33.30	10	10.89	33.30				25.45	251.3	0.025		
21	10.81	–	20	10.81	33.32				25.51	242.9	0.050		
31	10.60	33.42	30	10.81	33.34				25.54	246.4	0.075		
41	9.82	33.56	50	10.60	33.42				25.64	237.3	0.125		
103	9.21	33.68	75	9.85	33.56				25.87	216.3	0.187		
154	8.57	33.80	100	9.20	33.67				26.07	197.5	0.252		
204	8.16	34.00	150	8.59	33.79				26.26	179.9	0.378		
304	7.13	34.00	200	8.17	34.00				26.46	159.2	0.511		
403	6.70	34.11	250	7.88	34.01				26.56	152.2	0.639		
507	5.38	34.22	300	7.15	34.00				26.83	146.8	0.768		
752	4.50	34.31	400	6.58	34.10				26.77	134.1	1.018		
1004	3.87	34.34	500	6.00	34.17				26.92	121.2	1.261		
			600	5.40	34.21				27.02	111.6	1.497		
			700	4.91	34.27				27.18	101.9	1.734		
			800	4.50	34.31				27.21	95.2	1.969		
			1000	3.90	34.34				27.25	87.2	1.436		

CREST: March 6, 1949; 0522 GCT; 37°43'N, 123°58'W; sounding, missing; wind, 270°, force 1-2; weather, partly cloudy; sea, moderate; wire angle, 15°. 602

0	10.9	33.01	0	10.9	33.01				25.27	271.8	0.000		
11	10.77	32.82	10	10.77	32.82				25.22	276.8	0.027		
24	10.61	33.10	20	10.61	32.96				25.28	271.0	0.055		
45	9.77	–	30	10.40	33.14				25.46	254.2	0.081		
73	9.32	33.30	50	9.72	33.22				25.83	238.0	0.130		
97	8.81	33.42	75	9.30	33.31				25.97	225.3	0.188		
149	8.21	33.72	100	8.81	33.47				26.07	206.2	0.242		
199	7.47	33.86	150	8.10	33.81				26.33	172.5	0.337		
297	6.62	33.84	200	7.32	33.91				26.52	155.5	0.419		
396	6.23	34.05	250	6.86	33.92				26.61	147.3	0.494		
596	5.31	34.22	300	6.55	33.94				26.67	142.6	0.566		
848	4.14	34.28	400	6.11	34.08				26.82	129.5	0.710		
1278	3.07	34.31	500	5.52	34.17				26.98	114.9	0.825		
			600	5.04	34.23				27.08	105.7	0.935		
			700	4.61	34.29				27.13	101.3	1.039		
			800	4.25	34.32				27.16	99.4	1.139		
			1000	3.71	34.34				27.23	93.1	1.332		

CREST, March 5, 1949, 2335 GCT; 36°51'N, 124°48'W; sounding, missing; wind, 270°, force 3; weather, cloudy; sea, very rough; wire angle, 0°. 603

0	11.3	32.79	0	11.3	32.79				25.13	295.1	0.000		
10	11.25	32.81	10	11.25	32.81				25.14	293.1	0.029		
25	11.19	32.79	20	11.14	32.79				25.15	292.5	0.059		
50	9.69	33.19	30	10.97	32.81				25.19	286.3	0.088		
74	9.49	33.38	50	9.88	33.18				25.51	254.6	0.141		
98	9.11	33.48	75	9.41	33.29				25.67	240.8	0.203		
148	8.39	33.64	100	9.05	33.48				25.94	209.2	0.261		
203	7.53	33.86	150	8.34	33.84				26.30	171.2	0.365		
300	6.42	33.96	200	7.87	33.88				26.46	156.6	0.456		
496	5.62	33.95	250	6.65	33.91				26.69	146.5	0.539		
696	4.84	34.23	300	6.42	33.96				26.72	137.9	0.617		
944	4.11	34.31	400	5.73	33.96				26.81	129.5	0.771		
1327	3.14	34.41	500	5.28	34.09				26.94	117.8	0.915		
			600	4.82	34.23				27.10	108.8	0.956		
			700	4.51	34.29				27.18	96.7	1.054		
			800	4.21	34.31				27.23	92.4	1.150		
			1000	3.72	34.34				27.31	85.7	1.328		

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

604 CREST; March 5, 1949; 1803 GCT; 36°41.5'N, 125°32'W; sounding, missing; wind, 270°, force 4; weather, partly cloudy; sea, very rough; wire angle, 20°.

0	11.5	32.84	0	11.5	32.84	25.03	294.1	0.000
9	11.48	32.78	10	11.48	32.78	24.98	298.8	0.030
24	11.47	32.81	20	11.48	32.81	25.01	296.7	0.059
47	11.48	32.70	30	11.48	32.75	24.96	301.4	0.089
71	11.45	32.77	50	11.48	32.75	24.96	301.7	0.150
94	10.97	32.92	75	11.40	32.79	25.00	298.0	0.225
140	8.90	33.22	100	10.74	32.94	25.24	276.2	0.296
180	7.98	33.69	150	8.65	33.46	25.99	205.5	0.417
274	6.90	33.73	200	7.73	33.71	26.32	174.5	0.512
371	5.68	33.73	250	7.16	33.73	26.42	165.7	0.596
550	5.04	34.13	300	6.51	33.73	26.51	157.7	0.678
818	4.08	34.31	400	5.51	33.76	26.65	144.8	0.828
1238	3.09	34.34	500	5.15	34.01	26.90	122.2	0.962
			600	4.82	34.20	27.08	105.3	1.076
			700	4.45	34.26	27.18	96.9	1.177
			800	4.13	34.30	27.24	91.2	1.271
			1000	3.60	34.33	27.32	85.0	1.448

605 CREST; March 5, 1949; 1153 GCT; 36°28.5'N, 126°19'W; sounding, missing; wind, 290°, force 5; weather, partly cloudy; sea, high; wire angle, 28°.

0	11.4	32.95	0	11.4	32.95	25.13	284.7	0.000
9	11.38	32.90	10	11.38	32.90	25.09	288.2	0.029
22	11.39	32.86	20	11.38	32.86	25.06	291.3	0.058
45	11.40	32.86	30	11.39	32.86	25.06	291.8	0.087
67	11.23	32.81	50	11.39	32.86	25.06	292.0	0.145
90	11.49	33.01	75	11.15	32.81	25.06	292.3	0.218
135	9.19	33.37	100	10.70	33.04	25.33	268.0	0.288
176	8.56[a]	33.69	150	8.88	33.53	26.01	203.5	0.406
257	7.53[b]	33.57r	200	8.28	33.77	26.29	177.7	0.501
345	6.34	34.00	250	7.61	33.88	26.47	160.8	0.586
519	5.20	34.11	300	6.88	33.95	26.63	146.2	0.663
776	4.13	34.20	400	5.89	34.04	26.83	128.1	0.800
1190	3.18	34.33	500	5.29	34.10	26.95	117.2	0.923
			600	4.79	34.14	27.04	109.2	1.036
			700	4.39	34.18	27.12	102.5	1.142
			800	4.09	34.20	27.16	98.6	1.242
			1000	3.56	34.27	27.27	88.9	1.430

606 CREST; March 5, 1949; 0612 GCT; 36°17'N, 127°06'W; sounding, missing; wind, 270°, force 5; weather, partly cloudy; sea, high; wire angle, 33°.

0	11.5	32.77	0	11.5	32.77	24.97	299.6	0.000
8	11.50	32.84	10	11.50	32.85	25.03	293.9	0.030
21	11.50	32.86	20	11.50	32.86	25.04	293.4	0.059
41	11.53	32.75	30	11.51	32.79	24.98	299.1	0.089
62	11.42	32.83	50	11.50	32.77	24.97	300.5	0.149
82	11.37	32.95	75	11.41	32.89	25.08	290.8	0.223
123	10.63	33.04	100	11.14	32.99	25.21	279.3	0.294
167	9.17	33.49	150	9.59	33.25	25.75	235.4	0.423
247	8.28	33.89	200	8.78	33.73	26.18	188.2	0.529
327	7.55	34.02	250	8.24	33.90	26.39	168.8	0.617
481	6.30	34.13	300	7.79	33.99	26.53	155.9	0.699
720	4.80	34.13	400	6.94	34.09	26.73	138.2	0.845
1118	3.57	34.42	500	6.15	34.13	26.87	126.0	0.978
			600	5.43	34.13	26.96	118.0	1.100
			700	4.90	34.13	27.02	112.4	1.215
			800	4.48	34.16	27.09	106.1	1.324
			1000	3.84	34.30	27.27	90.2	1.521

a) Left thermometer reading of 9.18° rejected.
b) Left thermometer reading of 8.38° rejected.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	
CREST; March 4, 1949; 2358 GCT; 36°04'N, 127°55'W; sounding, missing; wind, 270°, force 5; weather, squally; sea, high; wire angle, 40°.													607
0	11.7	32.88			0	11.7	32.88			25.02	295.0	0.000	
8	11.62	32.84			10	11.64	32.84			25.00	297.0	0.030	
19	11.58	32.84			20	11.58	32.84			25.01	296.2	0.059	
39	11.58	32.81			30	11.58	32.82			25.00	298.0	0.089	
59	11.54	32.88			50	11.59	32.86			25.02	295.5	0.148	
79	11.23	32.81			75	11.33	32.81			25.03	295.3	0.222	
120	10.36	33.12			100	10.85	32.91			25.20	280.2	0.294	
162	9.16	33.35			150	9.42	33.27			25.72	231.3	0.422	
240	8.49	33.95			200	8.80	33.78			26.22	184.4	0.526	
326	7.66	33.96			250	8.39	33.96			26.42	166.4	0.613	
491	6.24	34.13			300	7.90	33.96			26.49	160.1	0.696	
734	4.72	34.18			400	6.99	34.04			26.69	142.7	0.846	
1178	3.42	34.31			500	6.17	34.13			26.87	126.2	0.981	
					600	5.44	34.16			26.98	116.0	1.102	
					700	4.90	34.17			27.05	109.4	1.215	
					800	4.45	34.20			27.12	103.2	1.321	
					1000	3.81	34.25			27.23	93.5	1.518	
CREST: March 4, 1949; 1742, 1815 GCT; 35°50'N, 128°42'W; sounding, missing; wind, 290°, force 5; weather, partly cloudy; sea, high; wire angle, 30°, 30°.													608
0	12.0	32.97			0	12.0	32.97			25.03	294.5	0.000	
9	8.86r	32.94			10	12.00	32.94			25.01	296.1	0.030	
22	11.99	32.94			20	12.00	32.94			25.01	296.2	0.059	
44	12.00	33.01			30	12.00	32.97			25.03	294.3	0.089	
67	11.70	32.95			50	11.97	33.00			25.06	292.0	0.147	
90	11.20	33.08			75	11.60	32.97			25.11	288.1	0.220	
134	8.88	33.44			100	10.35	33.15			25.47	254.2	0.288	
174	8.31[a]	33.78			150	8.63	33.63			26.12	192.6	0.400	
					200	7.98	33.87			26.41	166.0	0.489	
246	-	33.95			250	7.39	33.95			26.56	152.5	0.568	
319	6.68	33.98			300	6.88	33.98			26.66	143.9	0.643	
479	5.34	33.98			400	6.00	33.98			26.77	134.2	0.782	
719	4.32	34.20			500	5.22	33.99			26.87	124.6	0.911	
1144	3.20	34.36			600	4.78	34.06			26.98	114.8	1.031	
					700	4.41	34.17			27.11	103.7	1.141	
					800	4.11	34.26			27.20	94.7	1.240	
					1000	3.55	34.33			27.32	85.2	1.420	
CREST; March 4, 1949; 1155 GCT; 35°26'N, 129°27'W; sounding, missing; wind, 250°; force 5; weather, cloudy; sea, high; wire angle, 42°.													609
0	12.2	33.13			0	12.2	33.13			25.12	285.3	0.000	
7	12.22	32.92			10	12.20	32.88			24.93	304.0	0.029	
19	12.23	32.84			20	12.20	32.84			24.90	307.1	0.060	
37	12.23	-			30	12.23	32.85			24.90	307.2	0.091	
55	12.20	32.90			50	12.21	32.89			24.93	304.2	0.152	
74	12.24	33.04			75	12.29	33.04			25.04	295.0	0.227	
111	12.60	33.12			100	12.58	33.10			25.03	296.8	0.301	
151	9.83[b]	33.30			150	9.86	33.30			25.67	235.9	0.434	
217	8.06	33.77			200	8.42	33.70			26.22	184.8	0.539	
291	7.21	33.93			250	7.59	33.86			26.46	162.2	0.626	
443	5.49	33.91			300	6.93	33.93			26.61	148.4	0.704	
681	4.44	34.05			400	5.91	33.92			26.73	137.4	0.846	
1016	3.52	34.25			500	5.19	33.93			26.83	128.6	0.979	
					600	4.75	33.99			26.93	120.0	1.103	
					700	4.38	34.06			27.02	111.4	1.219	
					800	4.07	34.12			27.10	104.3	1.327	
					1000	3.56	34.24			27.25	91.2	1.523	

a) Left thermometer reading of 9.28° rejected.
b) Left thermometer reading of 10.27° rejected.

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4903

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

610 CREST; March 4, 1949; 0511 GCT; 35°22'N, 130°13'W; sounding, missing; wind, 225°, force 4; weather, rain; sea, high; wire angle, 33°.

0	12.5	33.17	0	12.5	33.17	25.09	288.2	0.000
8	12.66	33.24	10	12.68	33.24	25.11	286.5	0.029
21	12.64	33.04	20	12.68	33.04	24.96	301.1	0.058
43	12.64	33.17	30	12.66	33.07	24.99	298.7	0.088
65	12.63	33.13	50	12.65	33.16	25.06	292.4	0.147
87	12.66	33.22	75	12.69	33.15	25.04	294.6	0.221
130	11.77	33.40	100	12.79	33.29	25.13	286.8	0.293
172	9.73	33.44	150	10.63	33.41	25.62	240.7	0.426
254	8.16[a]	33.86	200	9.08	33.68	26.09	196.7	0.535
341	6.76	33.95	250	8.18	33.85	26.37	171.2	0.626
514	5.12	33.80r	300	7.40	33.92	26.53	155.6	0.709
747	4.28	34.14	400	6.10	33.97	26.75	136.1	0.854
1212	3.08	34.38	500	5.25	34.01	26.88	123.4	0.983
			600	4.75	34.06	26.98	114.9	1.103
			700	4.40	34.11	27.06	107.9	1.214
			800	4.09	34.17	27.14	100.8	1.319
			1000	3.51	34.28	27.28	87.8	1.507

701 CREST; March 7, 1949; 0001 GCT; 35°49'N, 121°50'W; sounding, missing; wind, 290°, force 2; weather, cloudy; sea, rough; wire angle, missing.

0	12.0	33.31	0	12.0	33.31	25.30	268.6	0.000
10	11.88	33.26	10	11.88	33.26	25.28	270.3	0.027
25	11.66	33.28	20	11.73	33.26	25.31	267.8	0.054
50	11.12	33.39	30	11.60	33.30	25.36	262.9	0.080
75	10.80	33.55	50	11.12	33.39	25.52	248.2	0.132
100	10.43	33.51r	75	10.80	33.55	25.71	231.3	0.191
150	9.29	33.87	100	10.43	33.70	25.89	214.5	0.247
200	8.42	33.91	150	9.29	33.87	26.21	184.6	0.347
300	7.50r	34.09	200	8.42	33.91	26.37	170.0	0.435
400	6.59r	34.09	250	7.87	34.01	26.54	154.9	0.517
500	6.18	34.16	300	7.40	34.09	26.67	143.1	0.591
641	5.42	34.14r	400	6.70	34.09	26.76	134.9	0.730
873	4.55	34.29	500	6.18	34.16	26.89	123.7	0.860
			600	5.65	34.21	27.00	114.9	0.979
			700	5.20	34.24	27.07	107.9	1.091
			800	4.82	34.27	27.14	102.2	1.196
			1000	(4.14)	(34.32)	(27.25)	(92.0)	(1.390)

702 CREST; March 7, 1949; 0525 GCT; 35°23.6'N, 122°33.5'W; sounding, missing; wind, 290°, force 3; weather, low fog; sea, rough; wire angle, 18°.

0	11.8	32.92	0	11.8	32.92	25.03	294.5	0.000
10	-	32.84	10	11.62	32.84	25.00	296.7	0.030
24	11.46	32.94	20	11.49	32.91	25.08	289.5	0.059
48	11.06	-	30	11.37	32.94	25.13	285.5	0.088
71	10.64	32.95	50	11.05	32.96	25.20	278.9	0.144
95	9.92	33.15	75	10.52	33.03	25.35	265.4	0.212
143	8.56	33.66	100	9.76	33.20	25.61	240.8	0.275
190	8.31	33.86	150	8.50	33.70	26.20	185.4	0.382
283	7.46	34.05	200	8.25	33.90	26.39	167.7	0.470
381	6.44	34.05	250	7.84	34.02	26.55	153.3	0.551
567	5.56	34.18	300	7.30	34.05	26.65	144.5	0.625
840	4.21	34.31	400	6.31	34.06	26.79	132.0	0.763
1152	3.45	34.38	500	5.80	34.13	26.91	121.5	0.890
			600	5.37	34.20	27.02	112.1	1.007
			700	4.84	34.26	27.13	101.9	1.114
			800	4.40	34.30	27.21	95.0	1.212
			1000	3.77	34.35	27.31	85.6	1.393

a) Left thermometer reading of 8.26° rejected.

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

CREST; March 8, 1949; 0520 GCT; 35°04'N, 123°20'W; sounding, missing; wind, 290°, force missing; weather, partly cloudy; sea, moderate; wire angle 23°. 703

0	12.5	32.95	0	12.5	32.95	24.92	340.2	0.000
17	12.44	33.08	10	12.47	33.05	25.01	296.5	0.032
28	12.30	33.04	20	12.39	33.08	25.05	293.0	0.061
42	11.45	-	30	12.21	33.04	25.05	292.8	0.091
65	10.72	32.99	50	11.08	33.00	25.22	276.5	0.148
91	10.53	33.22	75	10.63	33.07	25.36	264.4	0.215
115	10.50	33.12	100	10.55	33.20	25.48	253.7	0.280
204	8.12	33.89	150	9.53	33.44	25.83	220.4	0.399
296	7.08	33.17r	200	8.20	33.88	26.39	168.1	0.495
393	6.18	33.98	250	7.58	33.94	26.52	155.8	0.576
575	5.14	34.02	300	7.01	33.96	26.62	147.3	0.652
840	4.22	34.16	400	6.09	33.98	26.76	135.2	0.794
1149	3.45	34.07	500	5.49	34.00	26.85	127.2	0.925
			600	5.00	34.03	26.93	120.0	1.049
			700	4.65	34.09	27.02	112.3	1.164
			800	4.34	34.14	27.09	106.1	1.273
			1000	3.78	34.21	27.20	96.1	1.476

HORIZON; March 15, 1949; 0306 GCT; 33°50'N, 120°40'W; sounding, missing; wind, direction missing, force 2; weather, cloudy; sea, moderate; wire angle, 17°. 801

0	13.7	33.12	0	13.7	33.12	24.82	314.1	0.000
9	13.26	33.15	10	13.25	33.15	24.93	303.7	0.031
23	12.76	33.15	20	12.78	33.15	25.02	294.9	0.061
46	11.72	33.24	30	12.36	33.17	25.12	286.3	0.090
67	10.78	33.19	50	11.50	33.24	25.34	265.8	0.145
89	9.83	33.30	75	10.46	33.21	25.50	250.8	0.210
134	8.92	33.69	100	9.58	33.40	25.79	223.5	0.269
181	8.31	33.91	150	8.72	33.79	26.24	182.0	0.370
275	7.52	33.95	200	8.14	33.94	26.44	163.3	0.456
368	6.56	33.80r	250	7.77	33.96	26.54	154.3	0.536
552	5.67	34.09	300	7.33	33.95	26.57	152.3	0.613
842	4.48	34.16	400	6.38	33.97	26.71	139.4	0.759
1190	3.48	34.47	500	5.88	34.06	26.85	127.6	0.892
			600	5.43	34.12	26.95	118.9	1.016
			700	5.00	34.14	27.02	112.4	1.131
			800	4.61	34.16	27.08	107.6	1.241
			1000	3.94	34.26	27.23	94.4	1.444

HORIZON; March 15, 1949; 2155 GCT; 33°33'N, 121°21'W; sounding, missing; wind, direction missing, force 2; weather, cloudy; sea, moderate; wire angle, 22°. 802

0	14.2	33.37	0	14.2	33.37	24.91	305.8	0.000
9	13.66	33.33	10	13.66	33.33	24.99	298.4	0.030
23	13.20	33.28	20	13.27	33.29	25.04	293.8	0.060
45	12.17	33.28	30	12.85	33.28	25.11	281.8	0.089
67	11.32	33.28	50	12.00	33.28	25.27	272.2	0.144
89	10.59	33.33	75	11.05	33.29	25.45	255.2	0.210
134	9.18	33.68	100	10.13	33.39	25.69	232.8	0.271
180	8.34	34.00	150	8.85	33.93	26.32	173.5	0.373
274	7.35	33.96	200	8.08	34.00	26.50	157.9	0.455
365	6.24	33.98	250	7.56	33.97	26.55	153.3	0.533
545	5.60	34.04	300	7.09	33.96	26.61	147.9	0.608
821	4.49	34.36	400	6.04	33.99	26.77	134.0	0.749
1201	3.41	34.20	500	5.73	34.02	26.83	128.9	0.881
			600	5.36	34.09	26.93	120.0	1.006
			700	4.94	34.22	27.09	106.2	1.119
			800	4.57	34.35	27.23	93.0	1.218
			1000	3.96	34.32	27.27	90.0	1.401

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

803 HORIZON; March 15, 1949; 1610 GCT; 33°15'N, 122°05'W; sounding, missing; wind, direction missing, force 3; weather, cloudy; sea, moderate; wire angle, 30°.

0	13.6	33.13	0	13.6	33.13	24.85	311.5	0.000
9	12.98	33.15	10	12.94	33.15	24.99	297.9	0.030
21	12.54	33.13	20	12.58	33.13	25.05	292.7	0.060
41	12.48	33.15	30	12.50	33.14	25.07	291.3	0.089
60	11.80	33.24	50	12.25	33.18	25.15	283.8	0.147
78	11.38	33.48	75	11.44	33.47	25.52	248.7	0.213
116	10.37	33.39	100	10.83	33.42	25.60	241.9	0.275
154	8.90	33.64	150	9.00	33.62	26.06	198.6	0.385
235	7.70	33.96	200	8.20	33.87	26.38	169.3	0.477
312	6.72	33.95	250	7.52	33.97	26.56	152.8	0.558
376p	6.19[a]	33.98	300	6.90	33.96	26.63	146.0	0.632
634p	4.98	34.20	400	6.04	34.00	26.78	132.8	0.771
1020p	3.84	34.33	500	5.54	34.10	26.92	120.6	0.898
			600	5.11	34.18	27.03	110.3	1.014
			700	4.73	34.24	27.12	102.6	1.120
			800	4.39	34.28	27.20	96.2	1.220
			1000	3.88	34.33	27.29	88.2	1.404

804 HORIZON; March 15, 1949; 0950 GCT; 32°57'N, 122°48'W; sounding, missing; wind, 225°, force 2; weather, overcast; sea, moderate; wire angle, 9°.

0	13.9	33.13	0	13.9	33.13	24.79	317.2	0.000
10	13.44[b]	33.12	10	13.44	33.12	24.87	309.8	0.031
24	13.13	33.19	20	13.23	33.18	24.96	301.5	0.062
47	12.59[c]	33.15	30	13.05	33.18	24.99	298.3	0.092
70	11.40	33.21	50	12.40	33.16	25.10	288.5	0.151
92	10.71	33.15	75	11.28	33.20	25.35	265.3	0.220
138	9.09	33.48	100	10.37	33.16	25.48	253.2	0.285
186	8.56	33.93	150	8.93	33.74	26.16	189.1	0.395
279	7.67	34.07	200	8.44	33.98	26.42	164.9	0.483
370	6.64	34.02	250	7.95	34.05	26.56	153.1	0.564
553	5.26	34.25	300	7.40	34.07	26.65	144.5	0.638
890	4.18	34.40	400	6.39	34.04	26.76	134.8	0.777
			500	5.55	34.18	26.98	114.7	.902
			600	5.00	34.29	27.14	100.8	1.010
			700	4.62	34.33	27.21	94.2	1.107
			800	4.40	34.37	27.27	89.5	1.199
			1000	(3.90)	(34.44)	(27.37)	(80.4)	(1.369)

805 HORIZON; March 15, 1949; 0225, 0245 GCT; 32°40'N, 123°30'W; sounding, missing; wind, 200°, force 3; weather, overcast; sea, rough; wire angle, 36°, 47°.

0	13.9	33.08	0	13.9	33.08	24.74	321.4	0.000
8	13.73[d]	33.19	10	13.70	33.19	24.87	309.4	0.032
19	13.37	33.15	20	13.35	33.15	24.91	305.6	0.062
37	13.00	33.13	30	13.16	33.14	24.94	303.3	0.093
54	11.69[e]	33.01	50	12.36	33.02	25.00	297.6	0.153
71	10.87	33.21	75	10.71	33.22	25.46	254.6	0.222
107	9.72	33.26	100	9.94	33.25	25.62	239.9	0.284
			150	8.62	33.64	26.13	192.4	0.392
143	8.78	33.57	200	8.02	33.84	26.39	168.5	0.482
205	7.96	33.86	250	7.44	33.92	26.53	155.0	0.563
260	7.30	33.93	300	6.76	33.96	26.66	143.7	0.638
374_p	5.90	34.00	400	5.69	34.02	26.85	126.5	0.773
391	5.77	34.02	500	4.86				
593	4.19	33.86_r	600	(4.11)				

a) Middle thermometer reading of 6.75° rejected.
b) Middle thermometer reading of 14.59° rejected.
c) Middle thermometer reading of 12.70° rejected.
d) Left thermometer reading of 13.46° rejected.
e) Left thermometer reading of 11.58° rejected.

HORIZON; March 14, 1949; 2030 GCT; 32°22'N, 124°13'W; sounding, missing; wind, 110°, force 3; weather, overcast; sea, rough; wire angle, 12°. 806

OBSERVED Z m	T °C	S ‰	O_2 ml/L	PO_4-P µg at/L	INTERPOLATED Z m	T °C	S ‰	O_2 ml/L	PO_4-P µg at/L	COMPUTED σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m
0	13.9	33.17			0	13.9	33.17			24.81	315.3	0.000
10	13.13[a]	33.15			10	13.13	33.15			24.95	301.7	0.031
25	12.80	33.13			20	12.90	33.14			24.99	298.2	0.061
49	12.70	33.13			30	12.79	33.13			25.01	297.0	0.091
74	11.62	33.06			50	12.70	33.13			25.03	295.7	0.150
99	10.89	33.12			75	11.61	33.06			25.18	281.8	0.222
148	9.20	33.40			100	10.86	33.12			25.36	264.8	0.290
195	8.42	33.73			150	9.15	33.41			25.87	216.8	0.411
279	7.22	34.00			200	8.32	33.77			26.28	178.5	0.510
406	6.24[b]	33.96			250	7.57	33.95			26.53	154.8	0.592
714	4.54[c]	34.22			300	7.02	34.00			26.65	144.2	0.668
1110	3.11	33.93r			400	6.28	33.96			26.72	139.0	0.809
					500	5.66	34.00			26.82	131.2	0.944
					600	5.11	34.08			26.96	117.4	1.068
					700	4.61	34.21			27.12	102.9	1.178
					800	4.19	(34.22)			(27.19)	(98.0)	(1.279)
					1000	3.45	(34.13)			(27.25)	(90.7)	(1.468)

HORIZON; March 14, 1949; time, missing*; 32°05'N, 124°55'W; sounding, missing; wind, 110°, force 3; weather, cloudy; sea, moderate; wire angle, 30°, missing. 807

0	13.7	33.35			0	13.7	33.35			24.99	297.5	0.000
9	13.67[d]	33.22			10	13.70	33.22			24.90	307.3	0.030
21	13.67	33.24			20	13.69	33.24			24.91	305.7	0.061
41	13.51	33.17			30	13.60	33.21			24.91	306.5	0.092
60	13.47	33.26			50	13.49	33.20			24.92	305.7	0.153
					75	13.43	33.14			24.89	309.7	0.230
79	13.42	33.13			100	13.54	33.30			24.99	300.4	0.306
118	13.56	33.42			150	12.18	33.16			25.15	285.7	0.452
158	11.56	33.15			200	9.72	33.34			25.72	232.3	0.582
234	8.79	33.60			250	8.60	33.72			26.21	186.7	0.687
310	7.95	34.00			300	8.04	34.00			26.50	159.3	0.773
491	6.13	33.95			400	6.93	33.98			26.65	145.8	0.926
766	4.58	34.23			500	6.07	33.96			26.74	137.8	1.068
					600	5.36	34.05			26.90	123.0	1.199
					700	4.83	34.18			27.06	107.0	1.316
					800	(4.44)	(34.21)			(27.13)	(102.0)	(1.421)

HORIZON; March 14, 1949; 0637, 0737 GCT; 31°47'N, 125°38'W; sounding, missing; wind, 225°, force 3; weather, cloudy; sea, moderate; wire angle, 10°, 10°. 808

0	14.0	33.22			0	14.0	33.22			24.84	312.3	0.000
9	13.97[e]	33.15			10	13.88	33.15			24.80	316.1	0.032
22	13.52	33.15			20	13.59	33.15			24.86	310.3	0.063
41	13.32	33.30			30	13.43	33.23			24.96	301.5	0.093
57	13.38	33.19			50	13.36	33.22			24.96	301.8	0.154
74	13.34	33.37			75	13.36	33.37			25.08	291.1	0.228
113	13.08	33.19			100	13.20	33.24			25.01	298.5	0.302
155	10.17	33.19			150	10.28	33.18			25.51	251.3	0.439
238	9.79	34.00			200	9.93	33.82			26.07	199.0	0.552
322	8.01	34.14			250	9.59	34.04			26.29	179.3	0.646
519	6.19	34.25			300	8.56	34.12			26.52	157.9	0.730
793	4.47	34.22			400	7.19	34.20			26.79	133.2	0.876
					500	6.26	34.24			26.95	118.8	0.998
1234	3.36	-			600	5.51	34.25			27.04	110.2	1.110
					700	4.92	34.24			27.11	104.4	1.217
					800	4.47	34.22			27.14	101.6	1.320
					1000	3.84	(34.17)			(27.16)	(99.8)	(1.522)

a) Middle thermometer reading of 14.27° rejected.
b) Left thermometer reading of 5.93° rejected.
c) Middle thermometer reading of 4.43° rejected.
d) Middle thermometer reading of 13.80° rejected.
e) Left thermometer reading of 13.52° rejected.
* Time on station 1307 to 1547 GCT; messenger times unknown.

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
901	N. B. SCOFIELD; February 28, 1949; 2242 GCT; 32°40'N, 118°10'W; sounding, missing; wind, calm; weather, cloudy; sea, missing; wire angle, 10°.											
0	14.37	33.55			0	14.37	33.55			25.01	295.9	0.000
9	14.23	33.55			10	14.21	33.55			25.04	293.2	0.029
26	19.76r	33.53			20	14.19	33.54			25.04	293.4	0.059
48	13.30	33.49			30	14.13	33.52			25.04	294.2	0.088
74	12.08	33.37			50	13.69	33.49			25.11	287.8	0.146
100	10.77	33.46			75	12.08	33.37			25.33	267.5	0.216
149	9.78	33.71			100	10.77	33.46			25.63	239.2	0.279
198	8.99	34.09			150	9.79	33.70			25.99	205.2	0.390
298	7.80	34.09			200	9.00	34.09			26.43	165.0	0.483
399	6.73	34.05			250	8.36	34.10			26.53	155.4	0.562
598	6.38	34.31			300	7.80	34.09			26.61	148.7	0.639
896	4.63	34.43			400	6.73	34.05			26.73	138.4	0.783
1244	3.52	34.40			500	6.57	34.21			26.88	125.6	0.915
					600	6.34	34.31			26.98	116.7	1.036
					700	5.61	34.37			27.13	103.8	1.146
					800	5.04	34.41			27.22	94.5	1.245
					1000	4.25	34.44			27.34	84.5	1.424
902	N. B. SCOFIELD; March 1, 1949; 0705 GCT; 32°21'N, 118°53'W; sounding, missing; wind, 270°, force 2; weather, clear; sea, missing; wire angle, 5°.											
0	13.6	33.42			0	13.6	33.42			25.06	291.4	0.000
9	13.65	33.49			10	13.63	33.49			25.12	285.9	0.029
25	13.52	33.49			20	13.57	33.49			25.13	284.9	0.057
46	13.48	33.60			30	13.49	33.50			25.15	283.2	0.086
70	13.52	33.51			50	13.49	33.60			25.23	276.2	0.142
92	13.06	33.48			75	13.51	33.50			25.15	284.5	0.212
136	10.18	33.64			100	11.94	33.48			25.44	257.2	0.280
180	9.31	33.89			150	9.94	33.76			26.02	203.4	0.395
279	7.36	34.13			200	8.77	33.96			26.36	171.1	0.488
381	6.63	34.20			250	7.75	34.09			26.62	147.1	0.567
582	5.90	34.24			300	7.18	34.15			26.75	135.5	0.639
					400	6.48	34.21			26.89	123.0	0.768
					500	6.06	34.23			26.96	117.4	0.888
					600	(5.93)	(34.24)			(26.98)	(116.3)	(1.005)
903	N. B. SCOFIELD; March 1, 1949; 1339 GCT; 32°03'N, 119°31'W; sounding, missing; wind, 270°, force 1; weather, overcast; sea, missing; wire angle, 5°.											
0	13.2	33.49			0	13.2	33.49			25.20	277.9	0.000
9	13.26	33.49			10	13.21	33.49			25.20	278.1	0.028
26	13.65r	33.52			20	13.20	33.51			25.22	276.6	0.056
49	12.28	33.60			30	13.19	33.53			25.24	275.1	0.083
75	10.87	33.62			50	12.16	33.60			25.49	251.1	0.136
102	10.12	33.62			75	10.87	33.62			25.75	227.8	0.196
152	9.51	33.86			100	10.17	33.62			25.87	216.5	0.251
203	8.55	33.95			150	9.59	33.85			26.15	190.9	0.353
307	7.13	34.14			200	8.62	33.95			26.38	169.6	0.443
409	6.44	34.09			250	7.80	34.05			26.58	150.8	0.523
612	5.64	34.29			300	7.19	34.13			26.73	137.2	0.595
917	4.35	34.43			400	6.48	34.09			26.79	132.0	0.730
1263	3.36	34.65			500	6.08	34.17			26.91	122.1	0.857
					600	5.69	34.28			27.05	109.9	0.973
					700	5.20	34.34			27.15	100.4	1.078
					800	4.75	34.37			27.23	93.8	1.175
					1000	4.06	34.48			27.39	79.2	1.348

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

N. B. SCOFIELD; March 1, 1949; 2014 GCT; 31°42.5'N, 120°16'W; sounding, missing; wind, 270°, force 1; weather, overcast; sea, missing; wire angle, 30°. 904

0	13.65	33.51	0	13.65	33.51	25.13	284.7	0.000
8	13.71	33.49	10	13.66	33.47	25.10	288.1	0.029
23	13.67	33.42	20	13.67	33.42	25.05	292.2	0.058
44	13.72	33.44	30	13.70	33.42	25.05	293.1	0.087
68	12.79	33.40	50	13.75	33.44	25.05	292.9	0.146
92	11.52	33.30	75	13.32	33.35	25.07	291.9	0.219
139	9.74	33.40	100	11.00	33.30	25.47	254.1	0.287
184	8.76	33.80	150	9.50	33.46	25.85	218.5	0.405
276	7.51	33.98	200	8.60	33.84	26.29	177.3	0.504
366	6.45	34.09	250	7.93	33.94	26.47	161.0	0.588
532	6.18	34.33	300	7.20	34.01	26.63	146.1	0.666
789	4.71	34.45	400	6.34	34.14	26.85	126.5	0.802
1105	3.69	34.40	500	6.23	34.29	26.98	115.2	0.923
			600	5.71	34.38	27.12	103.0	1.032
			700	5.16	34.43	27.23	93.3	1.130
			800	4.70	34.45	27.29	87.3	1.220
			1000	3.97	34.43	27.36	81.9	1.389

N. B. SCOFIELD; March 2, 1949; 0228 GCT; 31°26'N, 120°53'W; sounding, missing; wind, 170°, force, 1; weather, overcast; sea, missing; wire angle, 8°. 905

0	13.6	33.40	0	13.6	33.40	25.05	291.9	0.000
9	13.61	33.33	10	13.60	33.33	25.00	297.2	0.029
26	13.54	33.35	20	13.59	33.34	25.01	296.3	0.059
49	13.47	33.39	30	13.53	33.36	25.04	294.2	0.089
80	12.85	33.26	50	13.39	33.39	25.09	289.5	0.147
102	11.80	33.28	75	12.97	33.27	25.08	291.2	0.220
152	9.09	33.66	100	12.15	33.28	25.25	275.5	0.291
201	8.45	33.87	150	9.16	33.63	26.04	200.6	0.410
300	7.18	33.87	200	8.47	33.87	26.34	173.1	0.503
404	6.38	34.07	250	7.72	33.88	26.46	162.3	0.586
610	5.26u	34.40	300	7.18	33.87	26.53	156.2	0.667
896	4.31	34.51	400	6.39	34.06	26.78	132.8	0.811
1235	3.32	34.58	500	5.79	34.20	26.97	116.2	0.936
			600	5.31	34.31	27.11	103.3	1.046
			700	4.92	34.39	27.22	93.4	1.144
			800	4.60	34.46	27.31	85.4	1.233
			1000	3.99	34.55	27.45	73.3	1.392

N. B. SCOFIELD; March 2, 1949; 0909 GCT; 31°07'N, 121°34'W; sounding, missing; wind, 170°, force 4; weather, squally; sea, missing; wire angle, 20°. 906

0	13.3	33.44	0	13.3	33.44	25.14	283.6	0.000
8	13.35	33.28	10	13.32	33.28	25.02	295.4	0.029
25	12.98	33.21	20	13.08	33.22	25.02	295.5	0.058
46	12.78	33.19	30	12.92	33.20	25.04	294.0	0.088
71	12.64	33.24	50	12.77	33.19	25.06	292.4	0.147
96	12.52	33.39	75	12.62	33.25	25.13	285.9	0.219
144	9.67	33.62	100	12.47	33.42	25.29	271.3	0.289
191	8.66	33.91	150	9.48	33.65	26.01	204.0	0.408
286	7.36	34.04	200	8.48	33.94	26.39	168.3	0.500
379	6.58	34.04	250	7.74	34.02	26.56	152.2	0.580
552	5.60	34.16	300	7.21	34.04	26.66	144.1	0.655
843	4.38	34.49	400	6.40	34.05	26.77	133.9	0.794
1168	3.45	34.56	500	5.87	34.11	26.89	123.8	0.923
			600	5.35	34.21	27.03	111.0	1.040
			700	4.90	34.33	27.18	97.4	1.144
			800	4.52	34.45	27.32	85.1	1.236
			1000	3.88	34.54	27.45	72.8	1.393

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
907	N. B. SCOFIELD; March 2, 1949; 1618 GCT; 30°50.5'N, 122°11'W; sounding, missing; wind, 180°, force 2; weather, partly cloudy; sea, missing; wire angle, 15°.											
0	13.89	33.42			0	13.89	33.42			25.01	296.1	0.000
9	13.94	33.51			10	13.91	33.51			25.07	290.2	0.029
25	13.92	33.42			20	13.91	33.45			25.03	294.7	0.059
48	13.48	33.35			30	13.81	33.40			25.01	296.7	0.088
75	13.07	33.31			50	13.43	33.34			25.04	294.0	0.147
101	11.67	33.33			75	13.07	33.31			25.09	290.1	0.220
150	9.55	33.51			100	11.82	33.32			25.34	266.6	0.290
197	8.62	33.75			150	9.55	33.51			25.88	215.7	0.411
296	7.27	33.86			200	8.59	33.76			26.23	183.1	0.510
397	6.49	33.96			250	7.80	33.84			26.41	166.3	0.597
595	5.25u	34.14			300	7.20	33.86			26.51	157.3	0.679
876	4.40	34.11r			400	6.42	33.97			26.71	140.1	0.826
1207	3.41	34.49			500	5.75	34.08			26.88	124.6	0.959
					600	5.23	34.14			26.99	114.8	1.079
					700	4.91	34.27			27.13	102.2	1.187
					800	4.62	34.41			27.27	89.3	1.283
					1000	4.00	34.49			27.40	77.9	1.451
908	N. B. SCOFIELD; March 2, 1949; 2358 GCT; 30°30'N, 122°51'W; sounding, missing; wind, 240°, force 3; weather, partly cloudy; sea, missing; wire angle, 10°.											
0	14.4	33.24			0	14.4	33.24			24.77	318.8	0.000
9	14.23	33.42			10	14.23	33.42			24.94	302.9	0.031
26	14.20	33.40			20	14.22	33.42			24.94	302.9	0.061
49	12.72	33.24			30	14.13	33.37			24.92	305.2	0.092
74	12.11	33.26			50	12.63	33.24			25.12	286.3	0.151
100	10.21	33.30			75	12.10	33.26			25.24	275.7	0.221
149	8.86	33.78			100	10.21	33.30			25.61	241.0	0.286
198	8.19	33.78			150	8.84	33.78			26.21	184.6	0.392
300	7.05	34.02			200	8.14	33.78			26.32	175.2	0.482
402	6.25	34.13			250	7.54	33.89			26.49	159.0	0.566
605	5.32	34.14			300	7.05	34.02			26.66	143.8	0.641
898	4.02	34.49			400	6.26	34.13			26.85	126.2	0.777
1238	3.16	34.51			500	5.78	34.14			26.92	120.4	0.900
					600	5.32	34.14			26.98	115.9	1.018
					700	4.82	34.23			27.11	104.0	1.128
					800	4.38	34.37			27.27	89.4	1.225
					1000	3.71	34.50			27.44	73.8	1.388
909	N. B. SCOFIELD; March 3, 1949; 0614 GCT; 30°11'N, 123°37'W; sounding, missing; wind, 140°, force 1; weather, partly cloudy; sea, missing; wire angle, 10°.											
0	13.4	33.28			0	13.4	33.28			25.00	296.9	0.000
9	13.05	33.28			10	12.98	33.28			25.09	289.0	0.029
26	12.36	33.21			20	12.51	33.22			25.13	284.8	0.058
49	12.24	33.26			30	12.32	33.21			25.16	282.4	0.086
75	12.06	33.28			50	12.23	33.26			25.22	277.5	0.142
101	11.92	33.31			75	12.06	33.28			25.25	274.4	0.211
150	9.31	33.49			100	11.93	33.31			25.31	269.4	0.279
199	8.53	33.96			150	9.31	33.49			25.91	213.2	0.400
301	7.23	34.11			200	8.52	33.96			26.40	167.6	0.495
401	6.40	34.14			250	7.81	34.07			26.59	149.5	0.574
602	5.49	34.27			300	7.22	34.11			26.71	139.0	0.647
891	4.16	34.47			400	6.42	34.14			26.84	127.6	0.780
1227	3.29	34.47			500	5.90	34.18			26.94	118.5	0.903
					600	5.49	34.27			27.06	108.3	1.017
					700	4.91	34.36			27.20	95.5	1.118
					800	4.48	34.44			27.31	85.7	1.209
					1000	3.80	34.49			27.42	75.7	1.370

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

N. B. SCOFIELD; March 3, 1949; 1232 GCT; 29°45'N, 124°16.5'W; sounding, missing; wind, 180°, force 3; weather, partly cloudy; sea, missing; wire angle, 18°. 910

0	13.90	33.31	0	13.90	33.31	24.92	304.7	0.000
9	14.02	33.31	10	14.01	33.31	24.90	306.7	0.031
25	13.77	33.35	20	13.85	33.34	24.96	301.5	0.061
47	13.42	33.30	30	13.71	33.35	24.99	298.4	0.091
72	13.36	33.28	50	13.41	33.30	25.02	296.5	0.150
98	13.40	33.19	75	13.38	33.28	25.01	298.0	0.225
146	12.84	33.30	100	13.40	33.19	24.94	305.7	0.300
194	10.13	33.46	150	12.69	33.31	25.17	284.4	0.448
293	8.12	34.11	200	9.96	33.48	25.80	225.2	0.576
392	7.06	34.13	250	8.82	33.96	26.36	172.4	0.675
587	5.54	34.22	300	8.03	34.12	26.60	150.0	0.755
862	4.22	34.36	400	6.98	34.13	26.76	135.8	0.898
			500	6.18	34.18	26.90	122.7	1.027
			600	5.53	34.23	27.02	111.9	1.145
			700	5.00	34.28	27.13	102.5	1.252
			800	4.50	34.33	27.22	93.8	1.350
			1000	(3.78)	(34.44)	(27.38)	(79.1)	(1.521)

N. B. SCOFIELD; March 3, 1949; 1907 GCT; 29°32.5'N, 124°57'W; sounding, missing; wind, 210°, force 2; weather, overcast; sea, missing; wire, angle 10°. 911

0	14.4	33.51	0	14.4	33.51	24.97	300.2	0.000
9	14.43	33.66	10	14.43	33.65	25.07	290.2	0.029
26	14.41	33.51	20	14.42	33.52	24.98	299.5	0.059
48	14.36	33.51	30	14.41	33.51	24.97	300.4	0.089
74	13.93	33.35	50	14.32	33.51	24.99	299.0	0.149
99	13.72	33.48	75	13.95	33.35	24.94	304.2	0.224
148	13.31	33.49	100	13.72	33.48	25.09	290.8	0.299
196	9.91	33.53	150	13.28	33.49	25.19	282.7	0.443
296	7.87	34.02	200	9.78	33.54	25.87	217.9	0.568
395	6.82	34.22	250	8.61	33.75	26.22	185.2	0.668
594	5.26	34.22	300	7.82	34.03	26.56	153.4	0.752
878	4.13	34.49	400	6.72	34.22	26.86	125.7	0.892
1207	3.36	34.58	500	5.85	34.23	26.99	114.6	1.012
			600	5.21	34.22	27.06	108.6	1.124
			700	4.73	34.31	27.18	97.0	1.227
			800	4.39	34.42	27.30	85.9	1.318
			1000	3.80	34.53	27.45	72.7	1.477

N. B. SCOFIELD; March 7, 1949; 0306 GCT; 31°22'N, 116°55.5'W; sounding, missing; wind, 340°, force 6; weather, partly cloudy; sea, missing; wire angle, 30°. 1001

0	13.78	33.40	0	13.78	33.40	25.02	295.4	0.000
8	13.85	33.44	10	13.87	33.45	25.03	293.8	0.029
21	13.90	33.53	20	13.90	33.52	25.09	289.1	0.059
42	12.72	33.44	30	13.70	33.51	25.12	286.4	0.087
62	11.50	33.40	50	12.22	33.42	25.34	265.8	0.143
84	10.28	33.62	75	10.71	33.41	25.59	242.1	0.206
122	9.43	33.62	100	9.82	33.63	25.93	210.0	0.263
162	8.98	33.86	150	9.11	33.81	26.19	186.7	0.362
244	8.39	34.05	200	8.67	33.97	26.38	168.9	0.450
327	8.12	34.09	250	8.37	34.06	26.50	158.5	0.533
493	6.69	34.09	300	8.23	34.08	26.54	155.9	0.611
750	5.15	-	400	7.58	34.10	26.65	146.5	0.762
			500	6.65	(34.09)	(26.77)	(135.6)	(.904)
			600	5.96	-	-	-	-
			700	5.41	-	-	-	-

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
1002	N. B. SCOFIELD; March 6, 1949; 2102 GCT; 31°00.5'N, 117°30'W; sounding, missing; wind, 350°, force 3; weather, cloudy; sea, missing; wire angle, 12°.											
0	14.70	33.53			0	14.70	33.53			24.92	304.2	0.000
9	14.59	33.62			10	14.59	33.62			25.02	295.7	0.030
26	14.46	33.58			20	14.51	33.60			25.02	295.8	0.060
48	13.87	33.51			30	14.38	33.56			25.02	296.3	0.089
74	13.07	33.58			50	13.84	33.51			25.09	289.8	0.148
100	12.28	33.80			75	13.10	33.58			25.29	270.9	0.218
150	10.26	33.68			100	12.28	33.80			25.62	240.2	0.282
200	8.83	33.87			150	10.26	33.68			25.89	214.9	0.396
302	7.96	34.09			200	8.83	33.87			26.28	178.5	0.494
403	7.25	34.13			250	8.29	34.00			26.47	161.4	0.578
606	5.52	34.14			300	7.98	34.08			26.58	152.0	0.657
895	4.42	34.33			400	7.30	34.13			26.71	140.2	0.804
1232	3.52	34.31			500	6.43	34.14			26.84	128.9	0.938
					600	5.58	34.14			26.95	119.3	1.063
					700	5.13	34.19			27.04	110.9	1.177
					800	4.77	34.26			27.14	102.2	1.283
					1000	4.12	34.35			27.28	89.6	1.475
1003	N. B. SCOFIELD; March 6, 1949; 1432 GCT; 30°40.5'N, 118°30.5'W; sounding, missing; wind, 360°, force 3; weather, cloudy; sea, missing; wire angle, 22°.											
0	14.5	33.46			0	14.5	33.46			24.90	306.2	0.000
8	14.51	33.62			10	14.50	33.62			25.03	294.3	0.030
24	14.44	33.64			20	14.47	33.63			25.05	292.7	0.059
45	14.08	33.71			30	14.37	33.66			25.09	288.7	0.088
69	13.45	33.60			50	14.00	33.71			25.21	278.2	0.145
93	11.69	33.44			75	13.18	33.54			25.25	275.4	0.214
138	9.32	33.87			100	11.11	33.45			25.57	244.9	0.279
183	8.80	33.82			150	9.13	33.87			26.23	182.4	0.386
277	7.90	34.18			200	8.66	33.85			26.29	177.5	0.476
371	6.89	34.23			250	8.20	34.07			26.53	155.2	0.560
558	5.77	34.31			300	7.62	34.20			26.72	138.1	0.633
831	4.59	34.38			400	6.68	34.24			26.89	123.6	0.764
1152	3.60	34.63			500	6.07	34.28			27.00	113.8	0.882
					600	5.53	34.33			27.10	104.5	0.991
					700	5.11	34.35			27.17	98.8	1.093
					800	4.70	34.37			27.23	93.3	1.189
					1000	4.07	34.48			27.39	79.5	1.362
1004	N. B. SCOFIELD; March 6, 1949; 0804 GCT; 30°15'N, 118°50'W; sounding, missing; wind, 350°, force 3; weather, cloudy; sea, missing; wire angle, 7°.											
0	13.80	33.48			0	13.80	33.48			25.07	290.0	0.000
9	13.81	33.46			10	13.81	33.46			25.06	291.8	0.029
26	13.19	33.48			20	13.40	33.47			25.15	283.1	0.058
49	13.03	33.51			30	13.18	33.49			25.21	278.0	0.086
75	10.84	33.35			50	13.05	33.51			25.25	274.1	0.141
102	9.91	33.57			75	10.84	33.35			25.53	247.7	0.206
152	8.94	33.78			100	9.98	33.56			25.85	217.7	0.265
201	8.15	33.95			150	8.97	33.78			26.19	186.6	0.366
304	7.75	34.14			200	8.17	33.95			26.45	162.9	0.453
407	6.38	34.05			250	7.93	34.07			26.57	151.3	0.532
612	5.02	34.16			300	7.79	34.14			26.65	144.7	0.605
909	4.18	34.49			400	6.46	34.06			26.77	133.9	0.745
1253	3.33	34.45			500	5.70	34.09			26.89	123.0	0.873
					600	5.09	34.15			27.01	112.4	0.991
					700	4.78	34.25			27.13	102.0	1.098
					800	4.48	34.37			27.26	90.6	1.195
					1000	3.93	34.50			27.42	76.5	1.362

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	
N. B. SCOFIELD; March 6, 1949; 0137 GCT; 29°52'N, 119°30'W; sounding, missing; wind, 320°, force 2; weather, cloudy; sea, missing; wire angle, missing.													1005
0	14.20	33.49			0	14.20	33.49			25.00	296.9	0.000	
9	14.22	33.49			10	14.21	33.49			25.00	297.3	0.030	
26	14.02	33.46			20	14.09	33.47			25.01	296.8	0.059	
50	13.90	33.48			30	14.01	33.46			25.02	296.2	0.089	
76	13.71	33.46			50	13.90	33.48			25.05	293.1	0.148	
103	12.83	33.33			75	13.72	33.46			25.07	291.7	0.221	
154	9.75	33.49			100	13.02	33.34			25.12	287.4	0.294	
204	9.21	33.96			150	9.86	33.47			25.80	223.4	0.422	
308	7.95	34.11			200	9.25	33.95			26.28	179.3	0.522	
413	6.78	34.11			250	8.69	34.05			26.44	164.1	0.608	
621	5.60	34.29			300	8.06	34.10			26.58	151.8	0.687	
919	4.17	34.40			400	6.89	34.11			26.76	136.0	0.830	
					500	6.19	34.18			26.90	122.8	0.960	
					600	5.70	34.27			27.04	110.9	1.077	
					700	5.19	34.33			27.14	101.2	1.183	
					800	4.70	34.37			27.23	93.4	1.280	
					1000	(3.78)	(34.41)			(27.36)	(81.3)	(1.455)	
N. B. SCOFIELD; March 5, 1949; 1856 GCT; 29°29'N, 120°13'W; sounding, missing; wind, 320°, force 1; weather, overcast; sea, missing; wire angle, 14°.													1006
0	14.95	33.64			0	14.95	33.64			24.95	301.4	0.000	
9	14.90	33.64			10	14.90	33.64			24.96	300.6	0.030	
25	14.84	33.62			20	14.84	33.63			24.97	300.3	0.060	
48	14.75	33.58			30	14.80	33.61			24.96	301.1	0.090	
74	14.68	33.66			50	14.77	33.58			24.95	303.2	0.151	
100	14.56	33.58			75	14.67	33.66			25.03	296.0	0.226	
149	11.73	33.51			100	14.56	33.58			24.99	300.6	0.300	
198	9.33	33.73			150	11.73	33.51			25.50	252.4	0.439	
298	8.22	34.16			200	9.31	33.76			26.12	194.3	0.550	
399	7.23	34.20			250	8.67	34.02			26.42	166.0	0.640	
600	5.68	34.33			300	8.20	34.16			26.61	149.5	0.719	
888	4.43	34.42			400	7.21	34.20			26.78	133.9	0.860	
1227	3.41	34.52			500	6.29	34.25			26.95	118.9	0.987	
					600	5.68	34.33			27.09	106.3	1.099	
					700	5.16	34.36			27.17	98.5	1.202	
					800	4.73	34.39			27.25	92.1	1.297	
					1000	4.02	34.46			27.38	80.4	1.470	
N. B. SCOFIELD; March 5, 1949; 1240 GCT; 29°07'N, 120°48'W; sounding, missing; wind, 230°, force 2; weather, partly cloudy; sea, missing; wire angle, 12°.													1007
0	14.75	33.62			0	14.75	33.62			24.98	298.6	0.000	
9	14.92r	33.62			10	14.79	33.62			24.97	299.5	0.030	
26	14.67	33.66			20	14.70	33.64			25.01	296.5	0.060	
49	14.60	33.68			30	14.62	33.66			25.05	293.4	0.089	
75	14.42	33.57			50	14.57	33.68			25.07	291.8	0.148	
101	14.26	33.51			75	14.42	33.57			25.01	297.8	0.221	
150	12.39	33.37			100	14.28	33.52			25.01	298.7	0.296	
199	9.51	33.53			150	12.39	33.37			25.27	275.0	0.440	
301	7.80	33.89			200	9.50	33.53			25.91	214.3	0.562	
402	7.10	34.11			250	8.40	33.72			26.24	183.7	0.661	
605	5.41u	34.20			300	7.80	33.89			26.45	163.4	0.748	
896	4.24	34.36			400	7.12	34.10			26.72	140.0	0.900	
					500	6.23	34.18			26.90	123.4	1.031	
					600	5.45	34.20			27.01	113.1	1.150	
					700	4.91	34.24			27.11	104.5	1.259	
					800	4.56	34.30			27.19	96.6	1.359	
					1000	(3.90)	(34.39)			(27.33)	(84.1)	(1.540)	

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1008 N. B. SCOFIELD; March 5, 1949; 0656 GCT; 28°51'N, 121°19'W; sounding, missing; wind, 230°, force 1; weather, partly cloudy; sea, missing; wire angle, 10°.

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
0	14.60	33.53			0	14.60	33.54			24.96	300.9	0.000
9	14.83	33.46			10	14.84	33.46			24.84	312.4	0.030
26	15.05	33.64			20	15.01	33.62			24.93	304.5	0.062
48	14.87	33.64			30	15.02	33.64			24.94	303.5	0.092
74	14.75	33.64			50	14.89	33.64			24.97	301.2	0.152
100	14.68	33.66			75	14.80	33.64			24.99	300.1	0.228
149	13.36	33.39			100	14.68	33.66			25.03	296.7	0.302
198	10.44	33.57			150	13.30	33.39			25.11	290.5	0.450
299	7.99	33.96			200	10.35	33.58			25.81	224.2	0.578
400	6.61	34.05			250	8.90	33.84			26.25	182.9	0.680
600	5.23	34.23			300	7.99	33.96			26.48	161.2	0.765
886	4.30	34.42			400	6.61	34.05			26.75	136.6	0.914
1219	3.39	34.49			500	5.84	34.15			26.92	120.4	1.043
					600	5.23	34.23			27.06	108.3	1.157
					700	4.88	34.32			27.17	98.5	1.261
					800	4.57	34.38			27.25	91.4	1.356
					1000	3.95	34.46			27.38	79.7	1.527

1009 N. B. SCOFIELD; March 5, 1949; 0053 GCT; 28°32'N, 121°50.5' W; sounding, missing; wind, 230°, force 1; weather, overcast; sea, missing; wire angle, 10°.

0	15.65	33.77			0	15.65	33.77			24.90	306.8	0.000
9	15.61	33.82			10	15.61	33.82			24.95	302.0	0.031
25	15.24	33.75			20	15.32	33.77			24.97	300.1	0.061
48	15.07	33.77			30	15.18	33.75			24.99	298.7	0.091
72	14.70	33.64			50	15.09	33.77			25.03	295.8	0.150
97	14.42	33.60			75	14.68	33.64			25.01	297.6	0.224
143	13.93	33.49			100	14.41	33.60			25.04	295.7	0.298
189	10.48	33.53			150	13.53	33.49			25.14	287.6	0.445
284	8.15	33.96			200	10.02	33.57			25.85	219.8	0.571
379	6.81	34.07			250	8.78	33.81			26.24	183.1	0.672
570	-	34.16			300	7.90	33.99			26.52	157.6	0.757
851	4.47	34.40			400	6.68	34.09			26.77	134.6	0.903
1192	3.39	34.56			500	6.05	34.18			26.92	120.9	1.031
					600	5.55	34.25			27.04	110.7	1.147
					700	5.10	34.32			27.14	101.3	1.253
					800	4.67	34.37			27.24	92.9	1.350
					1000	3.97	34.47			27.39	79.0	1.522

1010 N. B. SCOFIELD; March 4, 1949; 1925 GCT; 28°17'N, 122°23'W; sounding, missing; wind, 230°, force 1; weather, cloudy; sea, missing; wire angle, 5°.

0	15.3	33.75			0	15.3	33.75			24.96	300.9	0.000
9	15.38	33.78			10	15.38	33.78			24.97	300.1	0.030
26	15.36	33.82			20	15.37	33.81			24.99	298.0	0.060
49	15.33	33.80			30	15.34	33.82			25.01	297.0	0.090
76	15.17	33.77			50	15.34	33.80			24.99	299.1	0.149
102	14.49	33.60			75	15.20	33.77			25.00	298.8	0.224
152	13.12	33.62			100	14.56	33.60			25.01	298.8	0.299
203	10.02	33.62			150	13.20	33.62			25.30	271.8	0.442
306	7.78	34.02			200	10.12	33.62			25.87	217.7	0.564
409	6.62	34.14			250	8.78	33.78			26.22	185.3	0.665
614	5.52	34.31			300	7.87	34.05			26.57	152.7	0.749
907	4.26	34.42			400	6.71	34.13			26.79	132.8	0.892
1245	3.38	34.51			500	6.12	34.23			26.95	118.4	1.017
					600	5.60	34.30			27.07	107.5	1.130
					700	5.10	34.35			27.17	98.6	1.233
					800	4.63	34.39			27.26	90.9	1.328
					1000	3.95	34.44			27.37	80.7	1.500

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

N. B. SCOFIELD; March 4, 1949; 1212 GCT; 27°48'N, 122°52'W; sounding, missing; wind, 230°, force 2; weather, partly cloudy; sea, missing; wire angle, 20°. 1011

0	15.60	33.86	0	15.60	33.86	24.98	298.6	0.000
8	15.64	33.80	10	15.63	33.80	24.93	304.1	0.030
24	15.48	33.75	20	15.52	33.76	24.92	305.1	0.060
46	15.41	33.80	30	15.47	33.76	24.93	304.2	0.091
70	15.30	33.84	50	15.40	33.81	24.99	299.5	0.151
94	15.28	33.82	75	15.31	33.84	25.03	296.2	0.226
139	12.99	33.57	100	15.20	33.80	25.03	297.3	0.300
184	10.34	33.62	150	12.03	33.57	25.49	253.4	0.438
276	8.36	33.96	200	9.81	33.67	25.97	208.9	0.554
369	7.42	34.16	250	8.75	33.87	26.29	178.3	0.650
555	6.44	34.27	300	8.09	34.02	26.51	158.2	0.734
827	4.72	34.40	400	7.23	34.19	26.78	134.9	0.881
1159	3.65	34.52	500	6.75	34.25	26.88	125.0	1.011
			600	6.10	34.28	27.00	115.2	1.131
			700	5.39	34.34	27.13	103.0	1.240
			800	4.85	34.39	27.23	93.7	1.338
			1000	4.08	34.46	27.38	80.6	1.513

N. B. SCOFIELD; March 7, 1949; 1720 GCT; 29°23'N, 116°00'W; sounding, missing; wind, 340°, force 3; weather, partly cloudy; sea, rough; wire angle, 28°. 1101

0	14.6	33.66	0	14.6	33.66	25.05	292.5	0.000
8	14.59	33.66	10	14.59	33.66	25.05	292.7	0.029
23	14.59	33.69	20	14.60	33.69	25.07	290.8	0.059
43	14.57	33.66	30	14.60	33.68	25.06	291.8	0.088
66	14.05	33.64	50	14.52	33.66	25.06	292.4	0.146
89	13.01	33.60	75	13.73	33.62	25.20	280.0	0.218
132	10.57r	33.87	100	12.32	33.61	25.47	254.6	0.284
175	10.43	33.69	150	10.74	33.78	25.89	215.6	0.402
262	9.68	34.42	200	10.25	34.15	26.27	180.7	0.501
349	8.54	34.38	250	9.80	34.40	26.54	155.4	0.585
521	7.05	34.34	300	9.20	34.41	26.65	146.5	0.661
757	5.22	34.40	400	8.08	34.36	26.78	134.6	0.801
1001	4.12	34.49	500	7.21	34.34	26.89	124.9	0.931
			600	6.33	34.36	27.03	112.8	1.050
			700	5.59	34.38	27.14	102.7	1.157
			800	4.95	34.42	27.24	93.0	1.256
			1000	4.15	34.49	27.39	79.6	1.428

N. B. SCOFIELD; March 7, 1949; 2347 GCT; 29°12'N, 116°46'W; sounding, missing; wind, 350°, force 5; weather, partly cloudy; sea, rough; wire angle, 8°. 1102

0	14.65	33.62	0	14.65	33.62	25.00	296.8	0.000
9	14.64	33.62	10	14.64	33.62	25.00	296.7	0.030
26	14.40	33.62	20	14.50	33.62	25.04	294.0	0.059
49	14.02	33.71	30	14.36	33.62	25.07	291.0	0.088
75	12.69	33.66	50	14.01	33.71	25.21	278.4	0.145
101	10.99	33.62	75	12.69	33.66	25.44	257.2	0.212
150	9.45	33.80	100	11.05	33.62	25.71	231.3	0.273
199	9.05	34.07	150	9.45	33.80	26.13	192.6	0.380
302	8.42	34.13	200	9.04	34.07	26.41	167.1	0.469
405	7.48	34.27	250	8.78	34.09	26.46	162.5	0.552
609	5.88	34.31	300	8.43	34.13	26.55	155.2	0.631
900	4.57	34.40	400	7.56	34.27	26.79	133.6	0.776
1232	3.44	34.56	500	6.70	34.30	26.93	120.7	0.903
			600	5.95	34.31	27.03	111.6	1.019
			700	5.42	34.33	27.12	104.2	1.127
			800	4.97	34.36	27.19	97.4	1.228
			1000	4.19	34.44	27.34	83.7	1.409

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OBSERVED					INTERPOLATED					COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m
1103	N. B. SCOFIELD; March 8, 1949; 0610 GCT; 28°47'N; 117°21'W; sounding, missing; wind, 340°, force 4; weather, partly cloudy; sea, rough; wire angle, 30°.											
0	14.7	33.49			0	14.7	33.49			24.89	307.1	0.000
9	14.70	33.69			10	14.70	33.69			25.05	292.6	0.030
25	14.69	33.53			20	14.70	33.55			24.94	303.2	0.060
47	14.59	33.58			30	14.69	33.53			24.93	304.7	0.090
70	14.39	33.55			50	14.60	33.58			24.98	299.7	0.151
93	13.80	33.53			75	14.28	33.55			25.03	296.1	0.225
134	12.35	33.49			100	13.69	33.52			25.15	285.0	0.298
202	9.06	33.35			150	11.35	33.45			25.53	250.1	0.432
244	8.90	33.96			200	9.10	33.35			25.83	221.3	0.550
330	8.26	34.07			250	8.88	33.98			26.36	172.2	0.648
489	6.60	34.25			300	8.57	34.03			26.45	164.7	0.732
725	5.26	34.31			400	7.49	34.18			26.72	139.5	0.884
1011	4.14	34.49			500	6.57	34.26			26.92	121.8	1.015
					600	5.89	34.28			27.02	112.8	1.132
					700	5.36	34.30			27.10	105.5	1.241
					800	4.89	34.35			27.20	97.2	1.343
					1000	4.20	34.48			27.37	80.9	1.521
1104	N. B. SCOFIELD; March 8, 1949; 1238 GCT; 28°20.5'N; 118°03'W; sounding, missing; wind, 360°, force 3; weather, partly cloudy; sea, rough; wire angle, 25°.											
0	14.68	33.60			0	14.68	33.60			24.98	298.8	0.000
8	14.67	33.51			10	14.69	33.51			24.91	305.7	0.030
23	14.70	33.66			20	14.70	33.66			25.02	295.1	0.060
44	14.34	33.62			30	14.64	33.66			25.04	294.2	0.090
66	14.26	33.58			50	14.31	33.61			25.07	291.5	0.148
89	13.80	33.58			75.	14.19	33.58			25.07	292.3	0.221
131	11.29	33.71			100	13.34	33.61			25.27	274.0	0.292
173	9.72	33.95			150	10.41	33.83			25.99	205.8	0.412
258	8.45	34.11			200	9.22	34.02			26.34	173.7	0.507
343	8.30	34.34			250	8.53	34.10			26.51	158.0	0.589
513	6.47	34.34			300	8.34	34.23			26.64	146.5	0.666
765	5.06	34.40			400	7.89	34.35			26.80	132.6	0.806
1113	3.83	34.49			500	6.61	34.34			26.97	116.5	0.930
					600	5.52	34.36			27.13	102.2	1.040
					700	4.85	34.38			27.23	92.9	1.137
					800	4.40	34.41			27.30	86.7	1.227
					1000	3.94	34.46			27.38	79.5	1.393
1105	N. B. SCOFIELD; March 8, 1949; 1837 GCT; 28°03.5'N; 118°41.5'W; sounding, missing; wind, 360°, force 4; weather, partly cloudy; sea, missing; wire angle, 25°.											
0	15.50	33.77			0	15.50	33.77			24.94	302.8	0.000
8	15.48	33.77			10	15.49	33.77			24.94	303.0	0.030
24	15.48	33.75			20	15.49	33.76			24.93	304.1	0.061
44	15.01	33.64			30	15.41	33.72			24.92	305.7	0.091
68	14.57	33.60			50	14.88	33.62			24.95	302.7	0.152
91	13.88	33.64			75	14.45	33.61			25.04	295.2	0.227
136	11.25	33.86			100	13.46	33.67			25.29	271.7	0.298
180	9.84	34.04			150	10.74	33.94			26.02	203.5	0.417
270	8.41	34.22			200	9.44	34.09			26.36	171.9	0.510
361	7.86	34.25			250	8.65	34.19			26.56	153.2	0.591
542	6.24	34.31			300	8.20	34.24			26.67	143.6	0.666
804	4.70	34.42			400	7.49	34.25			26.78	133.9	0.805
1116	3.68	34.49			500	6.60	34.28			26.93	120.4	0.932
					600	5.81	34.34			27.08	107.4	1.046
					700	5.20	34.39			27.19	96.9	1.148
					800	4.70	34.42			27.27	89.6	1.241
					1000	3.99	34.47			27.39	79.2	1.410

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	
N. B. SCOFIELD; March 9, 1949; 0030 GCT; 27°43'N, 119°16.5'W; sounding, missing; wind, 330°, force 3; weather, partly cloudy; sea, missing; wire angle, 15°.													1106
0	15.3	33.69			0	15.3	33.69			24.93	304.1	0.000	
9	15.22	33.69			10	15.21	33.69			24.94	303.3	0.030	
25	15.01	-			20	15.10	33.69			24.96	301.2	0.061	
47	14.51	33.64			30	14.91	33.68			24.99	298.3	0.091	
72	12.87	33.48			50	14.34	33.63			25.08	290.8	0.149	
98	11.33	33.60			75	12.68	33.48			25.30	270.2	0.220	
145	10.33	33.87			100	11.28	33.61			25.66	235.9	0.283	
192	10.01	34.23			150	10.29	33.91			26.07	197.9	0.392	
290	8.64	34.31			200	9.92	34.24			26.39	168.5	0.483	
387	7.72	34.34			250	9.21	34.28			26.54	154.8	0.564	
582	6.09	34.36			300	8.52	34.32			26.68	143.0	0.638	
865	4.61	34.42			400	7.60	34.34			26.83	129.0	0.774	
1199	3.48	34.42			500	6.72	34.34			26.96	118.0	0.898	
					600	5.98	34.37			27.08	107.5	1.011	
					700	5.39	34.39			27.17	99.3	1.114	
					800	4.89	34.41			27.24	92.4	1.210	
					1000	4.10	34.43			27.34	83.4	1.386	
N. B. SCOFIELD; March 9, 1949; 0627 GCT; 27°20'N, 119°52'W; sounding, missing; wind, 320°, force 1; weather, partly cloudy; sea, missing; wire angle, 7°.													1107
0	15.0	33.64			0	15.0	33.64			24.94	303.0	0.000	
9	15.05	33.68			10	15.03	33.68			24.97	300.2	0.030	
26	15.01	33.66			20	15.02	33.67			24.96	301.1	0.060	
49	14.63	33.49			30	14.97	33.63			24.94	303.1	0.090	
75	14.40	33.60			50	14.65	33.49			24.90	307.4	0.152	
100	13.23	33.28			75	14.40	33.60			25.04	294.9	0.227	
149	10.51	33.55			100	13.23	33.28			25.03	296.5	0.301	
198	9.80	33.82			150	10.50	33.55			25.76	227.5	0.432	
299	8.70	34.21			200	9.79	33.83			26.09	196.8	0.538	
400	7.65	34.32			250	9.23	34.10			26.40	168.9	0.629	
602	5.89	-			300	8.69	34.21			26.57	153.2	0.710	
892	4.49	34.31u			400	7.65	34.32			26.81	131.1	0.851	
1232	3.50	34.33u			500	6.70	34.33			26.96	118.4	0.976	
					600	5.90	34.32			27.05	110.0	1.090	
					700	5.32	34.31			27.11	104.3	1.198	
					800	4.87	34.31			27.17	99.8	1.300	
					1000	4.11	34.32			27.26	91.5	1.491	
N. B. SCOFIELD; March 9, 1949; 1242 GCT; 26°57'N, 120°34.5'W; sounding, missing; wind, 350°, force 1; weather, partly cloudy; sea, missing; wire angle, 6°.													1108
0	15.2	33.58			0	15.2	33.58			24.86	310.8	0.000	
9	15.20	33.78u			10	15.19	33.78			25.01	296.2	0.030	
26	15.21	33.73u			20	15.19	33.75			24.99	298.7	0.060	
49	14.99	33.68u			30	15.17	33.72			24.97	300.7	0.090	
75	14.74	33.60u			50	14.98	33.68			24.98	300.3	0.150	
102	14.33	33.51u			75	14.74	33.60			24.97	301.9	0.225	
151	10.80	33.52u			100	14.37	33.51			24.98	301.8	0.301	
201	9.14	33.78u			150	10.82	33.52			25.68	235.7	0.435	
303	7.46	33.94u			200	9.16	33.78			26.16	190.3	0.542	
405	6.58	34.04			250	8.18	33.87			26.38	169.8	0.631	
608	5.76	34.36			300	7.50	33.94			26.54	155.4	0.713	
900	4.26	34.43			400	6.60	34.03			26.73	138.1	0.859	
1239	3.46	34.51			500	6.14	34.18			26.91	122.1	0.989	
					600	5.80	34.35			27.09	106.6	1.104	
					700	5.27	34.39			27.18	97.9	1.206	
					800	4.71	34.41			27.26	90.6	1.300	
					1000	3.94	34.45			27.38	80.1	1.471	

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	OBSERVED					INTERPOLATED					COMPUTED		
	Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
	m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
1109	N. B. SCOFIELD; March 9, 1949; 1818 GCT; 26°37'N, 121°03'W; sounding, missing; wind, 360°, force 1; weather, cloudy; sea, missing, wire angle, 2°.												
	0	16.18	33.87			0	16.18	33.87			24.86	310.5	0.000
	9	16.10	33.87			10	16.10	33.87			24.88	309.1	0.031
	26	16.09	33.86			20	16.10	33.86			24.87	310.1	0.062
	49	16.09	33.86			30	16.10	33.86			34.87	310.3	0.093
	75	15.88	33.86			50	16.10	33.86			24.87	311.0	0.155
	102	15.75	33.71			75	15.88	33.86			24.92	306.9	0.232
	152	12.24	33.48			100	15.77	33.74			24.85	314.1	0.310
	202	9.64	33.75			150	12.58	33.48			25.32	270.2	0.456
	306	8.42	34.16			200	9.65	33.75			26.06	200.4	0.574
	410	7.15	34.20			250	8.98	34.00			26.36	171.9	0.667
	618	5.51	34.29			300	8.48	34.15			26.55	154.5	0.748
	914	4.37	34.42			400	7.30	34.20			26.77	135.0	0.893
	1254	3.42	34.49			500	6.40	34.23			26.92	121.8	1.021
						600	5.64	34.28			27.05	109.6	1.137
						700	5.16	34.33			27.15	100.8	1.242
						800	4.76	34.38			27.23	93.3	1.339
						1000	4.10	34.44			27.36	82.3	1.515
1110	N. B. SCOFIELD; March 10, 1949; 0035 GCT; 26°15'N, 121°45'W; sounding, missing; wind, 270°, force 1; weather, cloudy; sea, missing; wire angle, 0°.												
	0	16.90	34.05			0	16.90	34.05			24.83	313.2	0.000
	9	16.62	33.98			10	16.61	33.98			24.84	312.1	0.031
	26	16.59	33.95			20	16.60	33.95			24.82	314.6	0.063
	49	16.53	34.02			30	16.58	33.95			24.83	314.4	0.094
	76	16.42	33.96			50	16.52	34.02			24.89	308.6	0.156
	102	16.25	33.93			75	16.40	33.97			24.88	310.3	0.234
	152	15.92	33.86			100	16.25	33.93			24.89	310.5	0.311
	202	10.03	33.58			150	15.88	33.86			24.92	308.9	0.466
	307	8.49	34.16			200	10.03	33.58			25.86	219.2	0.599
	411	6.94	34.04			250	9.32	33.81			26.16	191.7	0.701
	621	5.59	34.25			300	8.62	34.15			26.53	156.6	0.788
	918	4.38	34.34			400	7.11	34.04			26.67	143.9	0.939
	1263	3.31	34.38			500	6.32	34.15			26.86	126.7	1.074
						600	5.72	34.24			27.01	113.5	1.194
						700	5.23	34.29			27.11	104.6	1.302
						800	4.82	34.31			27.17	99.2	1.404
						1000	4.10	34.35			27.28	89.4	1.593
1111	N. B. SCOFIELD; March 10, 1949; 0516 GCT; 26°00'N, 122°10'W; sounding, missing; wind, 360°, force 1; weather, cloudy; sea, missing; wire angle, 0°.												
	0	16.8	33.93			0	16.8	33.93			24.75	320.7	0.000
	9	16.82	33.96			10	16.82	33.96			24.78	318.6	0.032
	26	16.79	33.84			20	16.82	33.85			24.69	326.5	0.064
	49	16.67	33.95			30	16.77	33.85			24.71	325.9	0.097
	76	16.59	33.89			50	16.69	33.95			24.80	317.3	0.161
	102	16.09	33.80			75	16.61	33.89			24.77	320.7	0.241
	150	14.12	33.53			100	16.15	33.80			24.81	317.7	0.321
	202	10.42	33.69			152	14.30	33.53			25.01	299.9	0.475
	306	8.15	34.02			200	10.54	33.69			25.86	219.7	0.606
	411	6.90	34.13			250	9.25	33.86			26.21	187.8	0.707
	621	5.79	34.33			300	8.27	34.00			26.48	162.0	0.794
	918	4.46	34.54			400	6.98	34.12			26.75	136.6	0.944
	1264	3.45	34.51			500	6.36	34.20			26.90	123.1	1.074
						600	5.88	34.31			27.04	110.3	1.191
						700	5.37	34.43			27.20	95.9	1.293
						800	4.90	34.50			27.31	86.1	1.385
						1000	4.20	34.54			27.42	76.5	1.547

OBSERVED					INTERPOLATED					COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P µg at/L	Z m	T °C	S ‰	O_2 ml/L	PO_4-P µg at/L	σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m

N. B. SCOFIELD: March 13, 1949; 0910 GCT; 27°30'N; 115°18'W; sounding, missing; wind, direction, missing, force 4; weather, partly cloudy; sea, missing; wire angle, 35°. 1201

0	14.0	33.55	0	14.0	33.55	25.09	288.7	0.000
7	14.17	33.49	10	14.18	33.49	25.00	296.8	0.029
21	14.16	33.53	20	14.17	33.53	25.04	293.9	0.059
40	14.14	33.53	30	14.17	33.53	25.04	294.3	0.088
60	13.38	33.55	50	13.87	33.54	25.11	288.2	0.147
80	11.58	33.66	75	11.70	33.65	25.62	239.9	0.213
114	11.32	33.57	100	11.48	33.61	25.63	239.4	0.272
141	11.04	33.87	150	10.92	33.98	26.01	203.7	0.383
209	10.08	34.31	200	10.22	34.27	26.36	171.4	0.477
294	9.32	34.49	250	9.73	34.43	26.57	152.5	0.558
491	7.40	34.45	300	9.25	34.49	26.70	141.2	0.631
784	5.14	34.43	400	8.29	34.47	26.83	129.8	0.767
1120	3.82	34.49	500	7.32	34.45	26.96	118.4	0.891
			600	6.39	34.43	27.07	108.4	1.005
			700	5.67	34.42	27.16	100.7	1.109
			800	5.07	34.43	27.24	93.5	1.206
			1000	4.20	34.46	27.36	82.4	1.382

N. B. SCOFIELD; March 13, 1949; 0146, 0221 GCT; 27°05'N; 115°54.5'W; sounding, missing; wind, 360°, force 3; weather, partly cloudy; sea, moderate; wire angle, 30°, 35°. 1202

0	15.5	33.68	0	15.5	33.68	24.86	310.1	0.000
8	15.53	33.62	10	15.52	33.62	24.82	314.6	0.031
22	15.52	33.69	20	15.52	33.69	24.87	309.8	0.062
41	15.52	33.69	30	15.52	33.69	24.87	310.3	0.093
			50	15.53	33.70	24.88	310.4	0.156
62	15.52	33.71	75	15.39	33.79	24.97	301.5	0.232
82	15.19	33.80	100	13.25	33.60	25.28	273.0	0.304
119	11.31	33.49	150	10.30	33.78	25.97	207.8	0.424
156	10.22	33.82	200	10.19	34.13	26.26	181.3	0.521
231	10.11	34.25	250	9.91	34.27	26.42	167.2	0.608
305	9.39	34.31	300	9.48	34.31	26.52	158.3	0.690
452	8.00	34.38	400	8.51	34.36	26.70	141.4	0.839
681	5.95	34.33	500	7.50	34.38	26.88	125.7	0.973
983	4.37	34.49	600	6.59	34.35	26.99	116.9	1.094
			700	5.82	34.33	27.07	109.4	1.207
			800	5.22	34.35	27.16	101.4	1.313
			1000	(4.31)	(34.50)	(27.38)	(81.0)	(1.495)

N. B. SCOFIELD; March 12, 1949; 1809 GCT; 26°37'N; 116°37'W; sounding, missing; wind, 020°, force 3; weather, cloudy; sea, rough; wire angle, 25°. 1203

0	15.65	33.89	0	15.65	33.89	24.99	298.0	0.000
9	15.72	33.87	10	15.71	33.86	24.96	300.8	0.030
21	15.71	33.84	20	15.69	33.84	24.95	302.6	0.060
39	15.69	33.86	30	15.69	33.85	24.95	302.2	0.090
55	15.59	33.86	50	15.70	33.86	24.96	302.3	0.151
70	13.86r	33.82	75	15.69	33.82	24.93	305.6	0.227
97	15.63	33.86	100	15.61	33.85	24.97	302.2	0.303
128	15.28	33.73	150	14.36	33.92	25.30	272.6	0.447
206	11.35	34.23	200	11.49	34.22	26.10	197.1	0.564
303	9.78	34.43	250	10.60	34.36	26.37	172.3	0.656
500	7.40	34.34	300	9.84	34.43	26.55	155.3	0.738
801	4.92	34.38	400	8.58	34.38	26.72	141.0	0.886
1133	3.73	34.42	500	7.40	34.34	26.86	127.9	1.021
			600	6.39	34.35	27.01	114.3	1.142
			700	5.59	34.37	27.13	103.5	1.251
			800	4.93	34.38	27.22	95.3	1.350
			1000	4.11	34.41	27.33	85.1	1.531

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

1204 N. B. SCOFIELD; March 12, 1949; 1128 GCT; 26°16'N, 117°03'W; sounding, missing; wind, 320°, force 2; weather, cloudy; sea, missing; wire angle, 23°.

0	15.6	33.82	0	15.6	33.82	24.95	301.7	0.000
8	15.63	33.78	10	15.61	33.78	24.92	305.0	0.030
24	15.64	33.78	20	15.61	33.78	24.92	305.3	0.061
45	15.19	33.77	30	15.54	33.78	24.93	304.1	0.091
69	14.80	33.69	50	15.10	33.76	25.02	297.0	0.151
92	14.05	33.55	75	14.62	33.65	25.03	295.8	0.226
136	10.56r	33.78	100	13.81	33.56	25.13	286.7	0.298
180	11.09	34.14	150	12.00	33.92	25.77	227.1	0.427
270	9.07	34.29	200	10.48	34.20	26.27	180.8	0.529
359	8.32	34.33	250	9.34	34.27	26.51	157.9	0.613
539	6.54	34.33	300	8.84	34.31	26.62	148.2	0.690
806	4.95	34.42	400	7.86	34.32	26.78	134.3	0.831
1133	3.73	34.49	500	6.89	34.32	26.92	121.8	0.959
			600	6.10	34.35	27.05	110.5	1.075
			700	5.49	34.39	27.16	100.6	1.181
			800	4.97	34.42	27.24	92.9	1.277
			1000	4.13	34.47	27.37	80.8	1.452

1205 N. B. SCOFIELD; March 12, 1949; 0516 GCT; 25°51'N, 117°37'W; sounding, missing; wind, 320°, force 2; weather, cloudy; sea, missing; wire angle, 30°.

0	16.1	33.77	0	16.1	33.77	24.81	315.2	0.000
8	16.06	33.75	10	16.05	33.75	24.80	316.7	0.032
22	15.92	33.75	20	15.96	33.75	24.82	314.8	0.063
41	15.74	33.75	30	15.88	33.75	24.84	313.6	0.095
63	15.45	33.75	50	15.62	33.75	24.89	308.8	0.157
83	15.14	33.75	75	15.26	33.75	24.97	301.7	0.233
121	14.20	33.60	100	14.80	33.72	25.05	294.9	0.308
158	11.11	33.71	150	11.31	33.65	25.69	234.7	0.441
232	10.34	34.34	200	10.68	34.16	26.20	187.3	0.546
304	9.46	34.43	250	10.19	34.37	26.45	164.6	0.634
450	7.55	34.42	300	9.57	34.43	26.60	150.7	0.713
676	5.72	34.42	400	8.16	34.43	26.82	130.7	0.853
1057	3.34	34.51	500	7.13	34.41	26.96	118.7	0.978
			600	6.32	34.41	27.07	109.2	1.092
			700	5.61	34.42	27.16	100.0	1.196
			800	4.94	34.44	27.26	91.1	1.292
			1000	3.72	34.49	27.43	74.7	1.457

1206 N. B. SCOFIELD; March 11, 1949; 2310 GCT; 25°26'N, 118°10'W; sounding, missing; wind, 320°, force 1; weather, cloudy; sea, missing; wire angle, 9°.

0	16.80	33.71	0	16.80	33.71	24.59	336.1	0.000
10	16.61	-	10	16.61	33.69	24.62	333.7	0.034
25	16.56	33.58	20	16.58	33.59	24.55	340.4	0.067
47	16.47	33.62	30	16.54	33.58	24.55	340.6	0.101
72	16.43	33.66	50	16.48	33.64	24.61	335.5	0.169
96	15.86	33.62	75	16.37	33.65	24.65	332.9	0.252
142	16.48r	33.82r	100	15.78	33.61	24.75	323.6	0.334
189	15.37	33.62	150	15.57	33.60	24.79	321.1	0.496
288	9.98	34.02	200	14.22	33.64	25.11	291.6	0.649
391	9.02	34.34	250	10.95	33.82	25.88	218.0	0.776
593	6.52	34.36	300	9.82	34.07	26.28	181.4	0.876
895	4.64	34.38	400	8.91	34.34	26.64	149.0	1.041
1233	3.55	34.51	500	7.68	34.36	26.84	130.2	1.181
			600	6.47	34.36	27.01	114.5	1.304
			700	5.70	34.35	27.10	106.3	1.414
			800	5.10	34.36	27.18	99.2	1.517
			1000	4.21	34.41	27.32	86.2	1.702

OBSERVED					INTERPOLATED					COMPUTED			SIO
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	CCOFI
m	°C	‰	ml/L	µg at/L	m	°C	‰	ml/L	µg at/L	g/L	$10^5 cm^3/g$	dyn. m	4903
K. B. SCOFIELD March 11, 1949 0444 GCT 25°05'N, 119°51'W sounding missing wind 320°, force 2 weather, cloudy; sea, slight; wire angle, 5°.													1207
0	16.15	33.64			0	16.15	33.64			24.68	326.9	0.000	
9	16.24	33.75			10	16.23	33.74			24.75	321.3	0.032	
26	16.04	33.87			20	16.10	33.85			24.86	310.7	0.064	
48	16.03	33.87			30	16.04	33.87			24.89	308.4	0.095	
74	16.05	33.82			50	16.04	33.87			24.89	309.3	0.157	
99	15.66	33.75			75	16.04	33.82			24.70	328.0	0.236	
146	15.98	33.77			100	15.64	33.75			24.89	310.5	0.316	
195	15.25	-			150	15.96	33.77			24.83	317.0	0.473	
295	9.71	33.91			200	15.11	33.81			25.05	297.6	0.627	
396	8.81	34.16			250	12.96	33.85			25.53	252.6	0.764	
500	6.51	34.07			300	9.66	33.92			26.19	189.7	0.875	
595	4.65	34.43			400	8.77	34.16			26.52	160.0	1.050	
1244	3.50	34.42			500	7.49	34.11			26.67	145.8	1.203	
					600	6.51	34.07			26.78	136.6	1.344	
					700	5.75	34.28			27.04	112.1	1.468	
					800	5.15	34.40			27.20	96.8	1.572	
					1000	4.27	34.43			27.33	85.4	1.755	
K. B. SCOFIELD, March 11, 1949 1106 GCT, 24°57'N, 119°21'W sounding missing wind 320°, force 2, weather cloudy; sea, smooth; wire angle, 4°.													1208
0	16.40	33.86			0	16.40	33.86			24.80	316.1	0.000	
9	16.51	33.91			10	16.50	33.91			24.81	314.8	0.031	
26	16.42	33.82			20	16.50	33.86			24.78	318.9	0.063	
48	16.04	33.86			30	16.36	33.82			24.78	319.0	0.095	
72	15.82	33.75			50	16.03	33.86			24.88	309.4	0.158	
96	15.71	33.69			75	15.80	33.74			24.84	313.9	0.235	
143p	15.92r	33.87r			100	15.69	33.69			24.83	315.5	0.314	
191	14.41	33.58			150	15.30	33.61			24.86	314.7	0.471	
292	10.67	34.36			200	14.03	33.60			25.12	290.9	0.623	
394	8.81	34.22			250	12.20	34.10			25.87	220.1	0.750	
594	6.51	34.38			300	10.62	34.36			26.36	173.7	0.850	
886	4.70	34.47			400	8.63	34.22			26.59	153.5	1.013	
1238	3.55	34.31u			500	7.38	34.30			26.84	130.4	1.155	
					600	6.42	34.39			27.04	111.7	1.276	
					700	5.71	34.44			27.17	99.7	1.382	
					800	5.15	34.47			27.26	91.5	1.477	
					1000	4.26	34.44			27.34	84.6	1.653	
K. B. SCOFIELD; March 11, 1949: 0444 GCT; 24°05'N, 119°53'W: sounding, missing; wind, 320°, force 2; weather, cloudy: sea, missing: wire angle, 6°.													1209
0	16.9	33.93			0	16.9	33.93			24.74	322.2	0.000	
9	16.90	33.98			10	16.90	33.98			24.78	318.5	0.032	
26	16.83	33.91			20	16.87	33.95			24.76	320.5	0.064	
49	16.71	33.82			30	16.82	33.88			24.72	324.9	0.096	
75	16.01	33.84			50	16.69	33.82			24.70	326.9	0.162	
102	15.64	33.71			75	16.01	33.84			24.87	311.2	0.241	
151	11.13	33.53			100	15.68	33.72			24.86	313.5	0.319	
201	10.04	34.00			150	11.16	33.54			25.63	240.2	0.457	
304	8.86	34.18			200	10.05	34.00			26.18	188.7	0.565	
409	7.98	34.31			250	9.40	34.10			26.37	172.4	0.655	
517	6.29	34.34			300	8.89	34.17			26.51	159.2	0.738	
913	4.62	34.40			400	8.05	34.30			26.74	138.7	0.887	
1256	3.55	34.56			500	7.21	34.32			26.88	125.8	1.019	
					600	6.46	34.33			26.99	116.7	1.141	
					700	5.72	34.35			27.10	106.5	1.252	
					800	5.14	34.37			27.18	98.9	1.355	
					1000	4.26	34.43			27.33	85.4	1.539	

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

1210 N. B. SCOFIELD; March 10, 1949; 2351 GCT; 23°55'N, 120°20'W; sounding,missing; wind,320°, force 1; weather, overcast; sea,missing; wire angle,12°.

0	17.10	33.95		0	17.10	33.95		24.71	325.1	0.000
9	17.10	33.93		10	17.10	33.93		24.69	326.9	0.033
25	17.07	33.93		20	17.08	33.93		24.69	326.8	0.065
48	16.99	33.91		30	17.04	33.93		24.70	326.2	0.098
74	16.94	33.89		50	16.98	33.91		24.70	326.7	0.163
99	16.57	33.86		75	16.93	33.89		24.70	327.7	0.245
147	13.24	33.53		100	16.56	33.86		24.76	322.4	0.326
195	10.42	33.84		150	12.86	33.53		25.30	271.8	0.475
294	9.63	34.38		200	10.32	33.89		26.05	201.0	0.594
392	8.47	34.45		250	9.90	34.22		26.38	170.6	0.686
589	6.44	34.42		300	9.58	34.39		26.57	154.0	0.767
874	4.77	34.51		400	8.36	34.45		26.81	132.3	0.910
1212	3.63	34.54		500	7.26	34.43		26.96	118.9	1.036
				600	6.38	34.42		27.07	109.0	1.150
				700	5.68	34.44		27.17	99.4	1.254
				800	5.11	34.48		27.27	90.3	1.349
				1000	4.23	34.53		27.41	77.6	1.517

301 CREST; April 6, 1949; 0435 GCT; 42°39.5'N, 125°04'W; sounding,missing; wind, direction missing, force 4; weather, clear; sea, rough; wire angle, 27°.

0	9.70	34.40r	6.63	0	9.70	(32.57)	6.63	25.13	284.5	0.000
9	9.82	32.57	6.53	10	9.83	32.57	6.52	25.11	286.8	0.029
22	9.82	32.61	6.57	20	9.83	32.60	6.56	25.13	284.8	0.057
43	9.07	34.45r	6.13	30	9.64	32.63	6.38	25.18	280.1	0.085
64	8.87	32.75	6.03	50	8.98	32.68	6.08	25.33	266.3	0.140
84	8.79	32.99	5.86	75	8.82	32.87	5.94	25.50	250.4	0.205
124	8.61	33.33	5.08	100	8.73	33.12	5.64	25.71	230.9	0.265
162	8.28	33.69	3.34	150	8.39	33.58	4.03	26.12	192.7	0.371
236	7.50	34.02	1.99	200	7.93	33.91	2.51	26.45	162.3	0.459
309	6.29	34.09	1.24	250	7.32	34.04	1.82	26.64	144.8	0.536
455	5.11	34.23	0.47	300	6.42	34.08	1.29	26.79	130.6	0.605
679	4.47	34.31	0.36	400	5.39	34.18	0.67	27.00	111.5	0.726
911	3.76	34.40	0.40	500	4.93	34.24	0.43	27.10	102.4	0.833
				600	4.66	34.28	0.37	27.17	97.5	0.933
				700	4.41	34.32	0.35	27.22	92.5	1.027
				800	4.12	34.36	0.35	27.29	87.0	1.118
				1000	(3.46)	(34.43)	(.47)	(27.41)	(75.8)	(1.281)

302 CREST; April 5, 1949; 2146 GCT; 42°34'N, 125°53'W; sounding,missing; wind,020°, force 2; weather, overcast; sea, moderate; wire angle, 19°.

0	9.5	32.70	5.32	0	9.5	32.70	5.32	25.26	272.1	0.000
9	9.24	32.74	4.82	10	9.20	32.74	4.82	25.34	264.8	0.027
24	8.87	34.34r	4.88	20	8.93	32.74	4.84	25.38	261.0	0.053
47	8.86	34.40r	4.73	30	8.87	32.74	4.85	25.39	260.2	0.079
70	8.29	32.74	5.19	50	8.82	32.73	4.72	25.39	260.6	0.131
93	8.02	33.26	4.11	75	8.20	32.76	5.13	25.51	249.8	0.195
139	7.72	33.80	2.66	100	7.98	33.45	3.68	26.08	195.5	0.251
185	7.25	33.86	2.36	150	7.63	33.82	2.58	26.42	164.0	0.341
275	6.76	33.91	1.44	200	7.16	33.87	2.19	26.53	154.7	0.421
366	6.17	34.09	1.03	250	6.89	33.89	1.69	26.58	150.0	0.496
547	4.98	34.11	0.64	300	6.62	33.95	1.28	26.67	142.7	0.569
828	3.99	34.45	0.32	400	5.91	34.10	0.93	26.87	124.0	0.703
1133	3.20	34.56	0.44	500	5.23	34.10	0.72	26.96	116.5	0.823
				600	4.76	34.16	0.58	27.06	107.5	0.935
				700	4.39	34.31	0.44	27.22	93.0	1.035
				800	4.07	34.43	0.34	27.35	81.2	1.123
				1000	3.52	34.52	0.34	27.47	70.1	1.274

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	µg at/L	m	°C	‰	ml/L	µg at/L	g/L	$10^5 cm^3/g$	dyn. m

CREST, April 5, 1949, 1646 GCT; 42°39'N, 126°36'W; sounding, missing; wind, 120°, force 3; weather, overcast sea, very rough; wire angle, 10°. 303

0	9.15	32.66	6.45	0	9.15	32.66	6.45	25.29	269.7	0.000
10	9.23	32.65	6.47	10	9.23	32.65	6.47	25.26	272.1	0.027
24	8.97	32.68	6.35	20	9.03	32.67	6.41	25.30	269.2	0.054
48	9.31	-	6.10	30	9.01	32.71	6.31	25.35	264.5	0.081
71	9.24	33.77r	6.23	50	9.30	32.87	6.11	25.42	257.4	0.133
94	9.14	33.19	5.58	75	9.23	33.06	6.19	25.59	242.6	0.196
139	8.27	33.40	4.00	100	9.11	33.22	5.33	25.73	229.4	0.254
184	7.33	33.77	3.46	150	8.01	33.48	3.86	26.10	194.6	0.361
276	6.25	33.95	2.62	200	7.09	33.83	3.33	26.51	156.6	0.448
369	5.56	33.98	1.68	250	6.50	33.93	2.88	26.67	142.1	0.523
557	4.59	34.13	0.61	300	6.06	33.96	2.38	26.74	134.9	0.592
837	4.96	34.38	0.36	400	5.38	34.00	1.42	26.86	124.8	0.722
1121	3.18	34.42	0.55	500	4.82	34.08	0.78	26.99	113.2	0.841
				600	4.46	34.18	0.50	27.11	102.4	0.949
				700	4.26	34.29	0.37	27.22	92.7	1.046
				800	4.11	34.36	0.35	27.29	86.8	1.136
				1000	3.60	34.41	0.44	27.38	79.0	1.302

CREST, April 5, 1949; 1047 GCT; 42°28'N, 127°37'W; sounding, missing; wind, 270°, force 3; weather, overcast sea, rough; wire angle, 21°. 304

0	9.50	32.66	6.03	0	9.50	32.66	6.03	25.23	275.1	0.000
9	9.34	32.57	6.04	10	9.27	32.57	6.04	25.20	278.3	0.028
22	9.02	32.57	6.14	20	9.05	32.57	6.13	25.24	274.9	0.055
45	8.92	-	-	30	8.95	32.57	6.15	25.25	273.4	0.083
67	8.89	32.61	5.96	50	8.91	32.59	6.09	25.27	272.0	0.137
90	8.63	32.66	5.73	75	8.85	32.62	5.90	25.30	269.7	0.205
135	7.58	33.46	4.49	100	8.39	32.72	5.52	25.45	255.7	0.271
182	7.26	33.80	3.69	150	7.48	33.67	4.21	26.33	173.0	0.378
275	6.27	33.95	2.48	200	7.07	33.84	3.47	26.52	155.7	0.460
368	5.58	34.04	1.24	250	6.51	33.92	2.82	26.66	143.0	0.535
553	4.64	34.14	0.55	300	6.06	33.98	2.08	26.76	133.4	0.604
837	3.89	34.38	0.30	400	5.37	34.06	1.07	26.91	120.3	0.730
1126	3.12	34.45	0.42	500	4.87	34.11	0.68	27.01	111.4	0.846
				600	4.48	34.17	0.47	27.10	103.4	0.954
				700	4.21	34.26	0.35	27.20	94.6	1.053
				800	3.98	34.35	0.30	27.30	86.1	1.143
				1000	3.48	34.43	0.33	27.41	76.1	1.306

CREST, April 5, 1949; 0410-0505 GCT; 42°25'N, 128°34'W; sounding, missing; wind, 270°, force 1; weather, low fog; sea, rough; wire angle, 5°, missing. 305

0	9.90	-	6.39	0	9.90	(32.66)	6.39	25.17	281.1	0.000
10	9.78	32.65	6.25	10	9.78	32.65	6.25	25.18	280.1	0.028
25	9.52	32.70	6.27	20	9.61	32.69	6.26	25.24	274.8	0.056
50	9.43	32.72	6.20	30	9.49	32.71	6.26	25.27	271.8	0.083
75	9.37	32.72	6.09	50	9.43	32.72	6.20	25.29	270.5	0.137
100	9.04	32.97	5.95	75	9.37	32.72	6.09	25.30	270.1	0.205
149	7.33	33.51	4.65	100	9.04	32.97	5.95	25.54	246.7	0.270
				150	7.32	33.52	4.53	26.23	182.1	0.377
199	7.06	33.82	3.45	200	7.07	33.82	3.43	26.50	157.2	0.461
298	5.98	33.87	2.70	250	6.55	33.86	3.03	26.60	147.8	0.538
398	5.22	33.98	1.44	300	5.97	33.87	2.68	26.69	140.5	0.610
595	4.32	34.14	0.54	400	5.20	33.98	1.42	26.87	124.2	0.742
892	3.74	34.31	0.30	500	4.68	34.07	0.82	27.00	112.2	0.860
1184	3.04	34.41	0.38	600	4.30	34.14	0.53	27.09	103.7	0.968
				700	4.07	34.21	0.38	27.17	96.7	1.068
				800	3.89	34.27	0.32	27.24	91.2	1.162
				1000	3.48	34.35	0.31	27.34	82.1	1.335

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

306 CREST; April 4, 1949; 2228 GCT; 42°16'N, 129°28'W; sounding, missing; wind, 242°, force 1; weather, overcast; sea, rough; wire angle, 0°.

0	10.32	32.63	6.48	0	10.32	32.63	6.48	25.08	289.6	0.000
10	9.71	32.63	6.47	10	9.71	32.63	6.47	25.17	280.5	0.028
25	9.14	32.68	6.63	20	9.26	32.67	6.62	25.28	270.7	0.056
50	9.05	32.63	6.46	30	9.13	32.68	6.63	25.30	268.7	0.083
75	8.59	32.52	6.41	50	9.05	32.63	6.46	25.28	271.2	0.137
100	8.04	32.72	6.06	75	8.59	32.52	6.41	25.27	272.7	0.205
149	7.45	33.40	4.72	100	8.04	32.72	6.06	25.50	250.7	0.270
199	7.07	-	-	150	7.44	33.41	4.68	26.13	192.0	0.381
297	5.84	33.98	2.47	200	7.06	33.72	3.83	26.42	164.7	0.470
396	5.18	34.00	1.42	250	6.49	33.91	3.07	26.65	143.4	0.548
593	4.43	34.22	0.51	300	5.81	33.98	2.42	26.79	130.4	0.616
881	3.75	34.40	0.32	400	5.06	34.00	1.40	26.90	121.0	0.741
1219	3.04	34.54	0.57	500	4.71	34.11	0.81	27.02	109.7	0.857
				600	4.41	34.22	0.51	27.15	99.0	0.961
				700	4.17	34.30	0.36	27.23	91.0	1.056
				800	3.92	34.36	0.31	27.31	84.8	1.144
				1000	3.49	34.45	0.37	27.42	74.9	1.304

307 CREST; April 4, 1949; 1732 GCT; 42°09.5'N, 130°15'W; sounding, missing; wind, 242°, force 1; weather, overcast; sea, rough; wire angle, 0°.

0	10.16	32.65	6.32	0	10.16	32.65	6.32	25.12	285.7	0.000
10	9.98	32.61	6.11	10	9.98	32.61	6.11	25.12	285.8	0.029
25	9.55	32.74	6.20	20	9.66	32.70	6.17	25.24	274.7	0.057
50	9.21	32.74	6.13	30	9.48	32.74	6.20	25.29	269.5	0.084
75	8.96	32.63	6.25	50	9.21	32.74	6.13	25.34	265.6	0.137
100	8.85	32.65	5.80	75	8.96	32.63	6.25	25.29	270.1	0.204
160	8.52	33.06	5.36	100	8.85	32.65	5.80	25.33	267.5	0.272
210	7.12	33.78	4.13	150	8.59	32.96	5.44	25.61	241.3	0.399
310	6.09	33.80	2.92	200	7.31	33.76	4.33	26.42	164.8	0.500
410	5.38	33.93	1.90	250	6.62	33.79	3.63	26.54	154.0	0.580
610	4.42	34.04	0.63	300	6.16	33.80	3.03	26.61	148.1	0.656
910	3.68	34.22	0.35	400	5.44	33.91	2.00	26.78	132.3	0.796
1261	2.94	34.34	0.52	500	4.87	33.98	1.21	26.91	121.2	0.923
				600	4.45	34.03	0.68	26.99	113.5	1.040
				700	4.17	34.10	0.47	27.08	105.8	1.149
				800	3.93	34.17	0.37	27.15	99.0	1.252
				1000	3.48	34.26	0.36	27.27	88.9	1.440

308 CREST; April 4, 1949; 1118 GCT; 42°04'N, 131°14'W; sounding, missing; wind, 335°, force 1; weather, clear; sea, rough; wire angle, 10°.

0	10.20	32.68	6.09	0	10.20	32.68	6.09	25.13	284.3	0.000
10	17.24r	32.66	6.23	10	10.00	32.66	6.23	25.15	282.7	0.028
25	9.77	32.66	6.25	20	9.83	32.66	6.25	25.18	280.3	0.056
49	9.58	32.65	5.97	30	9.72	32.66	6.22	25.20	278.9	0.084
74	9.22	32.61	6.21	50	9.56	32.65	5.98	25.21	277.4	0.140
98	8.35	32.59	6.16	75	9.19	32.61	6.21	25.24	275.5	0.209
147	8.35	32.99	5.66	100	8.34	32.59	6.13	25.36	264.4	0.277
196	7.68	-	-	150	8.30	33.06	5.61	25.73	229.9	0.401
294	6.82	33.86	3.76	200	7.64	33.54	4.98	26.20	185.7	0.504
392	5.64	33.84	2.38	250	7.00	33.77	4.35	26.47	160.6	0.590
588	4.48	34.02	0.87	300	6.75	33.86	3.67	26.58	151.2	0.669
881	3.67	34.25	0.38	400	5.58	33.85	2.28	26.72	138.5	0.814
1223	3.02	34.23	0.43	500	4.90	33.93	1.33	26.86	125.1	0.945
				600	4.43	34.04	0.84	27.00	112.6	1.064
				700	4.12	34.14	0.62	27.11	102.4	1.171
				800	3.87	34.22	0.46	27.20	94.5	1.270
				1000	3.43	34.26	0.35	27.28	88.3	1.453

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

CREST; April 4, 1949; 0525 GCT; 41°58.5'N, 132°07'W; sounding, missing; wind, 335°, force 2; weather, overcast; sea, rough; wire angle, 10°. 309

0	11.00	32.63	5.83	0	11.00	32.63	5.83	24.96	301.2	0.000
10	11.12	32.63	5.64	10	11.12	32.63	5.64	24.93	303.4	0.030
24	10.89	32.81	5.87	20	10.96	32.80	5.83	25.09	288.5	0.060
49	10.58	32.72	5.45	30	10.81	32.80	5.85	25.12	286.3	0.089
72	10.49	32.65	5.36	50	10.59	32.71	5.43	25.09	289.4	0.146
96	10.26	32.77	5.86	75	10.47	32.65	5.38	25.06	292.4	0.219
143	8.70	33.21	4.46	100	10.18	32.82	5.86	25.24	275.7	0.290
190	7.73	33.51	-	150	8.50	33.26	4.38	25.86	218.0	0.414
287	6.72	33.84	3.32	200	7.61	33.57	4.03	26.23	183.0	0.514
386	5.67	33.91	2.12	250	7.07	33.76	3.68	26.46	162.3	0.600
586	4.46	33.91	0.84	300	6.54	33.85	3.18	26.60	149.1	0.678
881	3.74	34.33	0.30	400	5.57	33.91	2.02	26.77	133.9	0.819
1175	3.10	34.51	0.42	500	4.86	33.91	1.27	26.85	126.2	0.949
				600	4.42	33.91	0.78	26.90	122.1	1.073
				700	4.17	33.97	0.49	26.97	115.5	1.192
				800	3.93	34.06	0.36	27.07	107.1	1.303
				1000	3.48	34.26	0.32	27.27	91.0	1.502

CREST; April 3, 1949; 2250 GCT; 41°52'N, 133°05'W; sounding, missing; wind, 315°, force 2; weather, overcast; sea, very rough; wire angle, 12°. 310

0	10.90	32.88	6.14	0	10.90	32.88	6.14	25.17	281.0	0.000
10	10.94	33.01	6.05	10	10.94	33.01	6.05	25.26	272.8	0.028
24	10.74	32.77	6.24	20	10.77	32.81	6.20	25.13	284.7	0.056
49	10.63	32.77	6.17	30	10.71	32.77	6.23	25.11	286.9	0.084
73	10.52	32.95	6.06	50	10.64	32.77	6.17	25.13	286.1	0.142
97	10.23 a)	32.84	6.07	75	10.50	32.95	6.06	25.29	270.9	0.211
146	9.66	33.12	5.53	100	10.19	32.84	6.05	25.26	274.3	0.279
194	8.09	33.58	4.40	150	9.48	33.15	5.44	25.62	241.1	0.408
290	7.18	34.02	2.60	200	8.03	33.63	4.24	26.22	184.7	0.515
386	6.09	34.00	1.98	250	7.58	33.95	3.22	26.53	155.1	0.599
575	4.46	34.14	0.88	300	7.07	34.02	2.53	26.66	143.6	0.674
857	3.78	34.36	0.34	400	5.91	34.00	1.88	26.80	131.4	0.812
1179	3.01	34.20r	1.31	500	4.91	34.07	1.27	26.97	114.9	0.935
				600	4.35	34.17	0.77	27.11	101.9	1.044
				700	4.08	34.27	0.52	27.22	92.2	1.141
				800	3.88	34.34	0.38	27.30	85.8	1.229
				1000	3.38	(34.37)	0.61	(27.37)	(79.4)	(1.394)

CREST; March 28, 1949; 0610 GCT; 40°50'N, 124°50'W; sounding, missing; wind, 315°, force 7; weather, rain; sea, very high; wire angle, 55°. 401-A

0	10.3	33.03	5.90	0	10.3	33.03	5.90	25.38	260.6	0.000
6	18.46r	32.92	6.02	10	10.30	32.93	6.06	25.31	267.8	0.026
15	10.29	32.99	6.06	20	10.33	33.02	6.06	25.37	262.1	0.053
31	10.40	33.06	6.01	30	10.39	33.06	6.02	25.40	259.9	0.079
47	10.36	33.15	5.78	50	10.35	33.17	5.77	25.49	251.4	0.130
64	10.25	33.26	5.60	75	10.06	33.36	5.23	25.68	233.5	0.191
98	9.54	33.64	3.82	100	9.50	33.65	3.76	26.00	203.2	0.245
132	8.93	33.84	3.10	150	8.62	33.88	2.68	26.32	173.9	0.340
197	8.04	33.96	1.78	200	8.02	33.97	1.68	26.48	159.3	0.423
382	6.55	34.23	0.57	250	7.60	34.06	1.18	26.62	147.3	0.500
569	5.20	34.22	0.43	300	7.21	34.15	0.87	26.74	136.1	0.570
818	4.06	34.40	0.40	400	6.40	34.23	0.55	26.92	120.6	0.698
				500	5.65	34.22	0.47	27.00	112.8	0.815
				600	5.02	34.23	0.42	27.08	105.4	0.924
				700	4.54	34.30	0.38	27.19	95.4	1.025
				800	4.13	34.39	0.39	27.31	84.9	1.116
				1000	(3.63)	(34.47)	-	(27.42)	(75.1)	(1.276)

a) Left thermometer reading of 10.38° rejected.

SIO

CCOFI

4904

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

401 CREST; April 6, 1949; 1650 GCT; 40°42'N, 124°45'W; sounding, missing; wind, 360°, force 2; weather, overcast; sea, rough; wire angle, 26°.

0	9.65	32.99	5.70	0	9.65	32.99	5.70	25.46	252.9	0.000
9	9.27	32.97	5.88	10	9.25	32.97	5.87	25.51	248.5	0.025
22	9.07	33.08	5.62	20	9.09	33.09	5.70	25.63	237.6	0.049
43	8.85	-	-	30	8.98	33.10	5.47	25.66	235.0	0.073
64	-	33.13	5.08	50	8.76	33.12	5.28	25.70	230.7	0.120
84	8.31	33.78	2.71	75	8.45	33.60	2.92	26.13	191.2	0.172
123	7.58	33.86	2.38	100	7.99	33.82	2.56	26.37	168.4	0.217
162	7.08	33.95	2.12	150	7.23	33.93	2.22	26.27	150.4	0.297
237	6.47	34.07	1.59	200	6.74	34.02	1.86	26.70	137.8	0.369
312	6.17	34.09	1.30	250	6.38	34.08	1.53	26.80	129.3	0.435
467	5.89	34.11	0.77	300	6.19	34.09	1.33	26.83	126.9	0.500
700	4.91	34.27	0.42	400	6.02	34.10	0.98	26.86	125.5	0.626
935	4.29	34.31	0.42	500	5.76	34.13	0.69	26.92	120.8	0.749
				600	5.31	34.20	0.51	27.03	111.3	0.865
				700	4.91	34.27	0.42	27.13	102.1	0.972
				800	4.63	34.29	0.38	27.18	98.5	1.072
				1000	(4.17)	(34.31)	-	(27.24)	(92.9)	(1.264)

403 CREST; April 1, 1949; 1420, 1644 GCT; 40°33'N, 126°24'W; sounding, missing; wind 315°, force 3; weather, overcast sea, rough; wire angle, 32°, 35°.

0	9.80	32.63	6.22	0	9.80	32.63	6.22	25.15	282.5	0.000
9	9.63	32.74	6.34	10	9.64	32.74	6.34	25.27	271.3	0.028
21	9.65	32.72	6.28	20	9.65	32.72	6.28	25.25	273.5	0.055
42	9.96	32.90	6.36	30	9.80	32.78	6.32	25.27	271.6	0.082
63	9.93	33.08	6.13	50	9.96	32.96	6.33	25.39	260.7	0.135
84	8.30	33.33	4.59	75	9.00	33.21	5.38	25.74	227.9	0.197
124	7.72	33.62	3.44	100	8.01	33.47	3.88	26.09	194.7	0.249
165	7.28	33.86	3.07	150	7.44	33.80	3.21	26.44	162.7	0.339
243	6.53	33.96[a]	1.36	200	6.94	33.93	2.05	26.61	147.1	0.417
323	5.93	34.02	1.46	250	6.48	33.98	1.35	26.71	138.0	0.487
487	4.96	34.11	0.74	300	6.10	34.01	1.44	26.77	132.5	0.555
				400	5.42	34.06	1.10	26.91	120.2	0.681
750	4.22[b]	34.31	0.38	500	4.91	34.12	0.72	27.01	111.3	0.797
1110	3.17	33.96r	2.13r	600	4.60	34.22	0.49	27.13	101.1	0.904
				700	4.34	34.30	0.40	27.22	93.2	1.001
				800	4.08	(34.31)	(0.40)	(27.25)	(90.3)	(1.093)
				1000	3.50	-	-	-	-	-

404 CREST; April 2, 1949; 0031, 0250 GCT; 40°12'N, 127°38'W; sounding, missing; wind, 315°, force 6; weather, partly cloudy; sea, very rough; wire angle, 25°, missing.

0	10.09	32.79	5.89	0	10.09	32.79	5.89	25.24	274.3	0.000
9	-	32.77	5.16	10	9.78	32.77	5.19	25.27	271.4	0.027
22	9.57	32.74	6.34	20	9.58	32.74	6.27	25.28	270.6	0.054
44	9.56	32.74	6.22	30	9.55	32.74	6.31	25.28	270.6	0.082
64	9.54	32.83	5.83	50	9.55	32.76	6.13	25.30	269.3	0.135
84	8.78	32.92	5.76	75	9.27	32.87	5.78	25.43	257.3	0.201
123	8.00	33.49	4.08	100	8.33	33.08	5.62	25.74	228.2	0.262
161	7.76[c]	33.78	3.40	150	7.84	33.72	3.54	26.31	174.4	0.363
236	6.76	34.02	2.52	200	7.23	33.94	2.92	26.57	150.4	0.443
311	6.03	34.07	1.62	250	6.62	34.03	2.31	26.73	136.3	0.516
467	4.98	34.14	0.77	300	6.12	34.07	1.73	26.82	127.5	0.581
				400	5.33	34.10	1.03	26.95	116.9	0.703
720	4.22	34.33	0.33	500	4.82	34.17	0.67	27.06	106.4	0.815
1043	3.29	34.29	0.65	600	4.52	34.26	0.46	27.17	97.3	0.918
				700	4.27	34.32	0.35	27.24	90.8	1.012
				800	4.00	34.34	0.33	27.28	87.1	1.101
				1000	3.43	34.31	0.56	27.32	84.6	1.272

a) Sample bottle not positively identified.
b) Left thermometer reading of 4.04° rejected.
c) Left thermometer reading of 8.85° rejected.

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

CREST; April 2, 1949; 1348 GCT; 39°58'N, 129°11'W; sounding, missing; wind, 315°, force 5; weather, partly cloudy; sea, very rough; wire angle, 28°. 406

0	9.70	32.75	6.08	0	9.70	32.75	6.08	25.27	271.6	0.000
9	9.78	32.81	6.35	10	9.78	32.81	6.36	25.30	268.2	0.027
21	9.75	32.77	6.36	20	9.75	32.77	6.35	25.27	271.0	0.054
42	9.75	32.83	6.14	30	9.75	32.80	6.28	25.30	269.2	0.081
62	9.72	32.75	6.21	50	9.74	32.81	6.13	25.31	268.6	0.135
82	8.47	33.19	5.11	75	9.34	32.96	5.82	25.49	251.7	0.200
118	7.78	33.58	3.84	100	8.00	33.43	4.35	26.06	197.5	0.256
154	7.50	33.82	3.26	150	7.53	33.80	3.32	26.42	164.1	0.346
228	6.87	33.94	2.79	200	7.14	33.92	2.97	26.57	150.4	0.425
304	6.04	33.98	1.91	250	6.62	33.95	2.58	26.67	142.0	0.498
457	4.86	34.08	0.95	300	6.08	33.98	1.98	26.76	133.6	0.566
703	4.08	34.25	0.37	400	5.23	34.04	1.22	26.91	120.0	0.693
1030	3.28	34.33	0.32	500	4.69	34.11	0.78	27.03	109.3	0.808
				600	4.37	34.19	0.54	27.13	100.7	0.914
				700	4.08	34.25	0.38	27.21	93.8	1.011
				800	3.83	34.28	0.34	27.25	89.7	1.103
				1000	3.35	34.32	0.32	27.33	82.9	1.275

CREST; April 3, 1949; 0038 GCT; 39°47'N, 130°42'W; sounding, missing; wind, 360°, force 3; weather, cloudy; sea, very rough; wire angle, 20°. 408

0	11.76	-	5.85	0	11.76	(32.92)	5.85	25.04	293.0	0.000
9	11.57	32.92	5.96	10	11.56	32.92	5.98	25.08	290.0	0.029
23	11.36	32.92	6.04	20	11.41	32.92	6.04	25.10	287.5	0.058
47	11.33	32.94	5.94	30	11.35	32.92	6.03	25.11	286.7	0.087
70	11.01	32.97	5.90	50	11.30	32.94	5.93	25.14	284.5	0.144
93	10.71	32.95	6.01	75	10.97	32.97	5.92	25.22	277.3	0.214
139	9.18	33.26	4.96	100	10.55	32.96	5.99	25.29	271.6	0.283
184	8.18	33.64	4.76	150	8.86	33.40	4.93	25.91	213.0	0.404
274	7.04	33.89	3.39	200	8.02	33.69	4.62	26.26	180.0	0.502
364	5.88	34.15	2.02	250	7.40	33.82	3.88	26.46	162.2	0.587
550	4.93	33.96r	0.62	300	6.65	33.99	2.98	26.69	140.1	0.663
841	4.03	34.34	0.35	400	5.63	34.17	1.45	26.97	115.2	0.791
1215	3.04	33.36r	5.77r	500	5.11	34.20	0.78	27.05	107.8	0.903
				600	4.76	34.21	0.52	27.10	103.7	1.008
				700	4.45	34.27	0.40	27.18	96.7	1.109
				800	4.15	34.33	0.35	27.26	89.5	1.202
				1000	3.60	(34.38)	-	(27.36)	(81.2)	(1.372)

CREST; April 3, 1949; 0720 GCT; 39°45'N, 131°36'W; sounding, missing; wind, 315°, force 2; weather, low fog; sea, rough; wire angle, 0°. 409

0	11.50	32.83	6.16	0	11.50	32.83	6.16	25.02	295.2	0.000
10	11.53	32.83	6.13	10	11.53	32.83	6.13	25.01	296.1	0.030
25	11.32	32.83	6.07	20	11.40	32.83	6.11	25.04	293.9	0.059
50	11.06	32.83	5.77	30	11.27	32.83	6.03	25.06	291.8	0.088
74	10.64	32.88	5.50	50	11.06	32.83	5.77	25.10	288.7	0.146
99	10.00	33.04	5.33	75	10.62	32.88	5.49	25.21	278.2	0.217
148	8.40	33.44	4.16	100	9.95	33.04	5.32	25.45	255.7	0.284
197	7.75	33.77	3.36	150	8.35	33.46	4.12	26.03	201.0	0.398
294	6.68	33.95	2.46	200	7.69	33.78	3.32	26.38	168.3	0.490
392	5.66	34.00	1.68	250	7.11	33.90	2.84	26.56	152.4	0.570
587	4.43	34.16	0.57	300	6.62	33.95	2.40	26.67	142.7	0.645
881	3.70	34.34	0.37	400	5.58	34.00	1.60	26.84	127.3	0.780
1223	2.96	33.06r	-	500	4.82	34.08	0.98	26.99	113.1	0.900
				600	4.39	34.17	0.56	27.11	102.3	1.008
				700	4.12	34.25	0.39	27.20	94.2	1.106
				800	3.89	34.30	0.35	27.26	88.8	1.197
				1000	3.43	(34.38)	-	(27.37)	(79.4)	(1.365)

SIO

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4904

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
501	CREST; April 7, 1949; 1551 GCT; 38°50'N, 124°05'W; sounding, missing; wind, 315°, force 3; weather, cloudy; sea, very rough; wire angle, 5°.											
0	9.47	33.64	4.84		0	9.47	33.64	4.84		26.00	201.8	0.000
10	9.60	33.60	4.84		10	9.60	33.60	4.84		25.95	207.0	0.020
25	9.23	33.57	4.19		20	9.35	33.58	4.36		25.97	205.1	0.041
50	8.96	33.75	4.12		30	9.16	33.58	4.18		26.00	202.2	0.062
74	8.64	33.80	3.57		50	8.96	33.75	4.12		26.17	186.8	0.100
99	8.42	33.84	2.86		75	8.62	33.80	3.55		26.25	178.0	0.146
148	8.05	34.02	2.00		100	8.41	33.84	2.84		26.32	173.0	0.190
198	7.40	34.05	1.60		150	8.03	34.02	1.98		26.52	154.7	0.271
296	6.74	34.07	1.04		200	7.37	34.05	1.55		26.64	144.2	0.347
395	6.20	34.14	0.79		250	7.00	34.06	1.27		26.70	139.0	0.417
592	5.32	34.24	0.36		300	6.71	34.07	1.03		26.75	135.1	0.486
888	4.10	34.34	0.41		400	6.18	34.14	0.77		26.87	124.4	0.616
1187	3.34	34.45	0.65		500	5.69	34.20	0.51		26.98	114.5	0.735
					600	5.27	34.24	0.35		27.06	107.7	0.846
					700	4.78	34.28	0.33		27.15	99.7	0.950
					800	4.39	34.31	0.36		27.22	94.2	1.047
					1000	3.78	34.38	0.49		27.34	83.4	1.224
502	CREST; April 7, 1949; 2034 GCT; 38°37'N, 124°57.8'W; sounding, missing; wind, 360°, force 1; weather, overcast; sea, rough; wire angle, 20°.											
0	11.1	33.03	6.27		0	11.1	33.03	6.27		25.25	273.1	0.000
9	10.82	33.10	6.15		10	10.81	33.15	6.15		25.39	250.1	0.026
24	10.74	33.24	6.16		20	10.76	33.23	6.15		25.46	253.6	0.051
47	10.69	33.23	5.91		30	10.73	33.24	6.13		25.47	252.3	0.077
71	9.41	33.32	5.56		50	10.66	33.23	5.88		25.48	252.3	0.127
95	8.83	33.39	4.40		75	9.28	33.33	5.40		25.71	230.7	0.188
143	8.18	33.80	2.85		100	8.76	33.41	4.10		25.93	209.8	0.243
190	7.66	33.88	2.56		150	8.08	33.82	2.80		26.36	170.4	0.337
286	6.56	33.89	1.90		200	7.53	33.88	2.51		26.48	158.9	0.420
383	6.34	34.10	0.84		250	6.88	33.88	2.20		26.57	150.9	0.497
577	5.22	34.20	0.37		300	6.52	33.91	1.73		26.65	144.5	0.570
872	4.13	34.40	0.40		400	6.27	34.12	0.76		26.84	127.1	0.706
1163	3.34	34.47	0.74		500	5.67	34.18	0.49		26.97	116.0	0.828
					600	5.12	34.22	0.35		27.06	107.6	0.940
					700	4.71	34.29	0.33		27.17	98.2	1.043
					800	4.37	34.36	0.35		27.26	90.0	1.137
					1000	3.77	34.45	0.52		27.40	78.2	1.306
503	CREST; April 8, 1949; 0147, 0205 GCT; 38°28'N, 125°48'W; sounding, missing; wind, 360°, force 1; weather, overcast; sea, rough; wire angle, 10°, 13°.											
0	11.46	33.13	6.25		0	11.46	33.13	6.25		25.26	272.2	0.000
10	11.01	33.13	6.22		10	11.01	33.13	6.22		25.34	264.9	0.027
24	10.58	33.15	6.14		20	10.65	33.14	6.18		25.41	258.7	0.053
49	10.42	33.17	5.89		30	10.54	33.16	6.10		25.45	255.2	0.079
74	9.38	33.45	4.73		50	10.40	33.17	5.87		25.48	252.6	0.130
98	8.62	33.69	3.33		75	9.38	33.47	4.65		25.88	214.7	0.188
					100	8.59	33.72	3.29		26.20	184.3	0.238
147	8.26	33.96	2.31		150	8.22	33.96	2.30		26.44	162.2	0.324
196	7.48	34.04	2.26		200	7.46	34.04	2.23		26.62	146.0	0.402
294	6.71	34.07	1.38		250	7.03	34.06	1.78		26.70	139.5	0.473
392	6.06	34.07	0.84		300	6.66	34.07	1.36		26.76	134.3	0.542
587	5.25	34.25	0.33		400	6.03	34.07	0.80		26.83	127.9	0.672
882	4.05	34.42	0.37		500	5.58	34.16	0.47		26.96	116.3	0.795
1176	3.18	34.47	0.57		600	5.19	34.26	0.32		27.09	105.3	0.906
					700	4.74	34.33	0.33		27.20	95.6	1.006
					800	4.34	34.39	0.35		27.29	87.6	1.098
					1000	3.68	34.45	0.42		27.40	77.2	1.262

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

CREST; April 8, 1949; 0752 GCT; 38°15'N, 126°47'W; sounding, missing; wind, 247°, force 2; weather, overcast; sea, rough; wire angle, 10°. 504

0	10.70	32.86	6.33	0	10.70	32.86	6.33	25.18	279.4	0.000
10	10.52	32.99	6.10	10	10.52	32.99	6.10	25.32	266.9	0.027
25	10.24	33.03	6.16	20	10.29	33.02	6.13	25.38	261.8	0.054
49	10.41	33.13	5.91	30	10.25	33.05	6.14	25.41	258.6	0.080
74	10.42	33.26	5.92	50	10.42	33.14	5.91	25.45	254.9	0.131
98	9.14	33.24	5.06	75	10.42	33.26	5.91	25.55	246.5	0.194
147	7.76	33.86	3.44	100	8.92	33.24	4.90	25.77	225.0	0.253
196	7.27	34.04	3.01	150	7.72	33.88	3.42	26.46	160.9	0.349
294	6.68	34.18	1.32	200	7.25	34.05	2.94	26.66	142.5	0.426
393	5.95	34.20	0.87	250	6.97	34.13	1.85	26.76	133.4	0.494
590	5.03	34.34	0.40	300	6.63	34.18	1.28	26.84	125.9	0.558
886	4.00	34.51	0.45	400	5.92	34.20	0.83	26.95	116.7	0.680
1181	3.16	34.56	0.72	500	5.42	34.26	0.55	27.06	107.1	0.793
				600	4.98	34.35	0.40	27.18	95.9	0.894
				700	4.62	34.42	0.39	27.28	87.7	0.986
				800	4.27	34.48	0.40	27.37	79.9	1.069
				1000	3.67	34.54	0.52	27.47	70.5	1.219

CREST; April 8, 1949; 1344 GCT; 38°03'N, 127°32'W; sounding, missing; wind, 315°, force 2; weather, overcast; sea, rough; wire angle, 5°. 505

0	11.01	32.81	6.25	0	11.01	32.81	6.25	25.09	288.3	0.000
10	11.13	32.79	6.36	10	11.13	32.79	6.36	25.05	291.9	0.029
25	10.31	32.75	6.39	20	10.53	32.76	6.39	25.14	284.7	0.058
50	10.14	32.77	6.28	30	10.26	32.75	6.38	25.18	280.9	0.086
74	10.02	32.74	6.20	50	10.14	32.77	6.28	25.21	277.9	0.142
99	9.09	32.79	6.06	75	10.00	32.74	6.19	25.21	278.3	0.212
149	8.53	33.37	4.58	100	9.08	32.80	6.05	25.40	260.0	0.279
199	7.72	33.86	3.30	150	8.50	33.42	4.56	25.98	206.3	0.396
299	6.90	34.05	1.76	200	7.71	33.87	3.28	26.45	162.3	0.487
397	5.52	34.04	1.35	250	7.32	34.01	2.43	26.62	147.1	0.565
596	4.64	34.18	0.48	300	6.88	34.05	1.74	26.71	138.7	0.636
896	3.94	-	0.38	400	5.51	34.04	1.32	26.88	123.6	0.768
1196	3.22	34.45	0.78	500	4.97	34.12	0.71	27.00	111.9	0.885
				600	4.63	34.18	0.47	27.09	104.5	0.994
				700	4.38	34.24	0.41	27.16	98.1	1.095
				800	4.16	34.29	0.39	27.23	92.6	1.190
				1000	3.69	34.37	0.45	27.34	83.2	1.366

CREST; April 8, 1949; 1801 GCT; 37°52'N, 128°12'W; sounding, missing; wind, calm; weather, cloudy; sea, moderate; wire angle, 10°. 506

0	12.32	32.88	6.19	0	12.32	32.88	6.19	24.91	305.9	0.000
10	12.05	32.94	6.04	10	12.05	32.94	6.04	25.00	296.8	0.030
25	11.78	32.88	6.08	20	11.84	32.89	6.07	25.00	297.0	0.060
49	11.71	32.88	5.87	30	11.75	32.88	6.06	25.01	296.6	0.090
74	11.71	32.88	6.07	50	11.71	32.88	5.88	25.02	295.9	0.149
98	9.94	33.17[a]	4.92	75	11.70	32.88	6.07	25.02	296.7	0.223
148	8.24	33.55	4.08	100	9.75	33.17	4.90	25.59	243.0	0.290
197	7.72	33.82	3.73	150	8.21	33.57	4.06	26.14	191.0	0.399
296	6.52	33.96	2.48	200	7.66	33.82	3.70	26.42	165.2	0.488
394	5.78	34.00	1.43	250	6.98	33.91	3.17	26.59	149.9	0.566
592	4.80	34.13	0.58	300	6.49	33.96	2.45	26.69	140.3	0.639
890	3.88	34.29	0.38	400	5.75	34.00	1.40	26.82	129.4	0.774
1188	3.08	34.38	0.69	500	5.21	34.06	0.86	26.93	119.2	0.898
				600	4.77	34.13	0.57	27.04	109.8	1.013
				700	4.44	34.20	0.45	27.13	101.7	1.119
				800	4.14	34.25	0.40	27.20	95.3	1.217
				1000	3.59	34.33	0.45	27.32	84.8	1.397

a) This was an extra sample chosen by elimination in place of designated sample of 32.88‰.

SIO

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4904

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

507 CREST; April 8, 1949; 2323 GCT; 37°46'N, 128°51'W; sounding, missing; wind, 225°, force 1; weather, cloudy; sea, rough; wire angle; 0°.

0	12.67	32.90	6.30	0	12.67	32.90	6.30	24.85	310.9	0.000
10	7.62r	32.81	6.17	10	11.82	32.81	6.17	24.94	302.5	0.031
25	11.67	32.83	6.18	20	11.70	32.82	6.17	24.97	299.8	0.061
50	11.84	32.92	6.10	30	11.69	32.85	6.16	25.00	297.6	0.091
74	11.38	32.94	6.06	50	11.84	32.92	6.10	25.03	295.3	0.150
99	10.33	33.01	5.52	75	11.37	32.94	6.06	25.13	286.3	0.223
148	8.55	33.53	4.27	100	10.25	33.02	5.50	25.39	262.2	0.291
198	7.88	33.80	2.81	150	8.51	33.55	4.10	26.08	196.7	0.406
297	6.64	33.95	2.28	200	7.86	33.80	2.79	26.37	169.4	0.497
396	5.69	33.93	1.40	250	7.20	33.90	2.47	26.55	153.7	0.578
593	4.72	34.20	0.51	300	6.60	33.95	2.26	26.67	142.4	0.652
892	3.83	34.38	0.38	400	5.66	33.93	1.38	26.76	134.8	0.791
1188	3.08	34.42	0.68	500	5.10	34.06	0.75	26.94	118.0	0.918
				600	4.69	34.20	0.50	27.10	103.6	1.028
				700	4.37	34.29	0.40	27.20	94.2	1.127
				800	4.08	34.34	0.38	27.27	88.0	1.218
				1000	3.54	34.40	0.44	27.38	79.1	1.385

508 CREST; April 9, 1949; 0542 GCT; 37°32'N, 129°48'W; sounding, misssng; wind, 225°, force 2; weather, cloudy; sea, moderate; wire angle, 15°.

0	12.60	32.90	5.45	0	12.60	32.90	5.45	24.87	309.5	0.000
10	5.8 r	32.86	5.28	10	12.45	32.86	5.28	24.86	310.2	0.031
24	11.74	32.86	5.61	20	11.81	32.86	5.55	24.98	298.9	0.062
48	11.67	32.81	5.44	30	11.71	32.85	5.60	25.00	298.1	0.091
73	10.38	32.92	4.76	50	11.63	32.81	5.43	24.98	300.0	0.151
97	9.21	33.22	4.67	75	10.25	32.95	4.75	25.33	266.9	0.222
146	8.04	33.64	3.26	100	9.09	33.26	4.67	25.76	226.0	0.284
194	7.43	33.89	2.70	150	7.97	33.67	3.21	26.26	179.8	0.385
291	6.34	33.98	2.50	200	7.35	33.90	2.68	26.53	154.9	0.468
388	5.38	34.00	1.40	250	6.81	33.96	2.54	26.65	143.8	0.544
583	4.65	34.16	0.46	300	6.22	33.98	2.45	26.74	135.5	0.613
875	3.85	34.34	0.42	400	5.31	34.01	1.25	26.88	123.3	0.742
1165	3.12	34.43	0.58	500	4.90	34.08	0.63	26.98	113.9	0.861
				600	4.59	34.17	0.46	27.09	104.6	0.970
				700	4.31	34.25	0.44	27.18	96.6	1.071
				800	4.04	34.31	0.44	27.26	89.9	1.164
				1000	3.53	34.39	0.45	27.37	79.8	1.334

509 CREST; April 9, 1949; 1159 GCT; 37°20'N, 130°40'W; sounding, missing; wind, 200°, force 3; weather, overcast; sea, very rough; wire angle, 11°.

0	12.38	32.90	5.98	0	12.38	32.90	5.98	24.91	305.7	0.000
10	3.49 r	32.83	5.92	10	12.19	32.83	5.92	24.89	307.3	0.031
24	11.97	32.86	5.99	20	12.03	32.85	5.96	24.94	303.4	0.061
48	11.69	32.86	5.96	30	11.92	32.86	5.99	24.96	301.0	0.091
72	10.85	32.77	5.83	50	11.65	32.86	5.96	25.01	296.4	0.151
96	9.56	33.12	5.06	75	10.70	32.77	5.80	25.11	287.4	0.224
144	8.19	33.62	3.44	100	9.34	33.21	4.91	25.68	233.6	0.289
191	7.82	33.93	2.54	150	8.13	33.69	3.28	26.25	180.8	0.393
286	6.56	34.02	1.85	200	7.73	33.95	2.48	26.51	156.5	0.477
382	5.74	34.00	1.16	250	7.11	34.00	2.13	26.64	145.0	0.553
574	4.70	34.20	0.55	300	6.42	34.02	1.75	26.75	135.0	0.622
863	3.88	34.34	0.36	400	5.61	34.01	1.07	26.84	126.9	0.753
1153	3.12	34.43	0.66	500	5.06	34.12	0.69	26.99	113.0	0.873
				600	4.63	34.21	0.52	27.11	102.2	0.981
				700	4.33	34.27	0.43	27.19	95.3	1.080
				800	4.06	34.31	0.38	27.25	90.2	1.172
				1000	3.53	34.39	0.44	27.37	79.8	1.342

S10

CCOFI 4904

OBSERVED					INTERPOLATED					COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m
CREST; April 9, 1949; 1712 GCT; 37°10'N, 131°20'W; sounding, missing; wind, 200°, force 3; weather, overcast; sea, rough; wire angle, 19°.												510
0	12.35	32.88	5.89		0	12.35	32.88	5.89		24.90	306.6	0.000
9	12.39	32.84	5.42		10	12.40	32.84	5.42		24.86	310.7	0.031
24	11.86	32.88	5.84		20	12.09	32.87	5.55		24.93	304.7	0.062
47	11.16	32.81	5.58		30	11.63	32.87	5.84		25.03	294.5	0.092
70	10.75	32.74	5.64		50	11.12	32.80	5.60		25.06	292.0	0.150
93	9.66	32.79	5.75		75	10.59	32.74	5.67		25.11	288.0	0.223
139	9.05	33.37	4.79		100	9.55	32.85	5.72		25.37	263.6	0.292
185	7.97	33.75	3.57		150	8.75	33.49	4.46		26.00	204.8	0.409
278	7.24	33.96	2.36		200	7.82	33.81	3.30		26.39	168.2	0.502
370	6.08	34.00	1.68		250	7.45	33.92	2.61		26.53	155.6	0.583
560	4.92	34.13	0.56		300	6.99	33.97	2.24		26.63	146.3	0.659
857	3.65	34.29	0.40		400	5.85	34.02	1.35		26.82	129.1	0.796
1154	3.10	34.47	0.70		500	5.26	34.09	0.73		26.95	117.6	0.920
					600	4.69	34.15	0.50		27.06	107.3	1.032
					700	4.20	34.20	0.41		27.15	98.8	1.135
					800	3.83	34.26	0.39		27.24	91.3	1.230
					1000	3.31	34.37	0.49		27.38	78.8	1.400
HORIZON; April 7, 1949; 2043 GCT; 37°16'N, 123°10'W; sounding, missing; wind, 340°, force 3; weather, partly cloudy; sea, rough; wire angle, 0°.												601
0	12.3	33.01	6.06	0.55	0	12.3	33.01	6.06	0.55	25.01	296.5	0.000
10	11.40	33.03	5.90	1.12r	10	11.40	33.03	5.90	0.57	25.18	279.6	0.029
24	11.03	33.15	6.09	0.62	20	11.12	33.06	6.07	0.60	25.26	272.3	0.056
48	6.43r	33.33	5.73	0.80	30	10.91	33.24	6.08	0.65	25.44	255.5	0.083
71	10.42	33.34	5.66	0.98	50	10.60	33.33	5.73	0.80	25.57	244.0	0.133
94	10.86[a]	33.26	5.63	0.91	75	10.45	33.33	5.66	0.98	25.59	242.1	0.194
141	9.12	33.60	3.61	1.61	100	10.79	33.26	5.60	0.92	25.47	254.6	0.256
191	8.18	33.86	3.04	1.88	150	8.88	33.67	3.48	1.67	26.12	193.3	0.368
291	7.18	34.04	1.80	2.33	200	8.07	33.89	2.97	1.93	26.41	165.8	0.457
391	6.34	34.11	0.79	2.70	250	7.54	33.99	2.48	2.16	26.57	151.7	0.537
592	5.16	34.18	0.34	3.05	300	7.08	34.05	1.66	2.37	26.68	141.6	0.610
792	4.37	34.29	0.28	3.11	400	6.27	34.11	0.75	2.73	26.84	127.9	0.745
					500	5.62	34.15	0.47	2.95	26.95	117.6	0.867
					600	5.10	34.19	0.34	3.06	27.04	109.5	0.981
					700	4.68	34.24	0.29	3.10	27.13	101.4	1.087
HORIZON; April 7, 1949; 1710 GCT; 37°03'N, 123°57'W; sounding, missing; wind, 180°, force 3; weather, overcast; sea, moderate; wire angle, 7°.												602
0	12.0	33.06	6.26	0.57	0	12.0	33.06	6.26	0.57	25.10	287.0	0.000
10	11.36	33.08	6.35	0.51	10	11.36	33.08	6.35	0.51	25.24	274.6	0.028
24	11.41	33.21	6.46	0.48	20	11.40	33.20	6.43	0.48	25.32	266.5	0.055
48	10.93	33.22	6.26	0.62	30	11.36	33.22	6.46	0.48	25.35	264.6	0.082
71	9.72	33.21	5.33	0.99	50	10.86	33.22	6.21	0.63	25.44	256.3	0.134
95	8.65	33.49	4.11	1.36	75	9.21	33.22	5.11	1.04	25.71	230.5	0.195
144	8.21	33.89	3.06	1.84	100	8.58	33.61	3.90	1.52	26.12	192.3	0.247
194	7.63[b]	34.02	2.42	2.00	150	8.16	33.91	2.97	1.85	26.42	165.0	0.337
294	6.47	34.00	1.92	2.33	200	7.58	34.02	2.38	2.02	26.59	149.1	0.416
394	5.70	34.05	1.13	2.47	250	7.00	34.02	2.11	2.19	26.67	142.0	0.488
594	4.76	34.25	0.41	2.94	300	6.41	34.00	1.85	2.34	26.73	136.4	0.557
891	3.87	34.43	0.38	3.12	400	5.68	34.06	1.09	2.48	26.87	123.2	0.687
1192	3.26	34.49	0.81	-	500	5.17	34.17	0.69	2.79	27.02	110.7	0.804
					600	4.74	34.25	0.39	2.95	27.13	100.6	0.911
					700	4.38	34.32	0.29	3.05	27.23	92.0	1.007
					800	4.08	34.38	0.29	3.10	27.31	84.9	1.095
					1000	3.60	34.46	0.52	-	27.42	75.4	1.255

a) Middle thermometer reading of 10.95° rejected.
b) Middle thermometer reading of 7.86° rejected.

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

603 HORIZON; April 7, 1949; 1146 GCT; 36°50'N, 124° 43'W; sounding, missing; wind, 090°, force 1; weather, partly cloudy; sea, moderate; wire angle, 6°.

0	12.4	32.97	6.29	0.42	0	12.4	32.97	6.29	0.42	24.96	301.0	0.000
10	11.38	33.08	6.21	0.43	10	11.38	33.08	6.21	0.43	25.23	275.2	0.029
24	11.18	33.12	6.29	0.42	20	11.21	33.12	6.29	0.44	25.30	269.2	0.056
48	11.18	33.12	6.04	0.53	30	11.19	33.12	6.25	0.46	25.30	268.9	0.083
71	9.83	33.38	5.42	0.93	50	11.16	33.12	5.98	0.56	25.31	268.9	0.137
94	9.23	33.44	4.62	1.16	75	9.68	33.39	5.30	0.97	25.77	225.2	0.199
142	8.20	33.84	3.16	1.60	100	9.09	33.46	4.30	1.25	25.92	211.2	0.253
192	7.88	33.98	2.49	1.86	150	8.10	33.87	3.01	1.66	26.39	167.0	0.348
292	6.93	34.05	1.62	2.20	200	7.79	33.99	2.40	1.91	26.53	154.3	0.428
393	6.05	34.07	1.23	2.34	250	7.28	34.03	1.92	2.09	26.64	144.9	0.503
592	4.82	34.23	0.41	2.59	300	6.84	34.05	1.58	2.21	26.71	138.3	0.573
893	3.96	34.45	0.47	2.77	400	5.99	34.07	1.17	2.35	26.84	127.3	0.706
1194	3.32	34.48	0.78	-	500	5.30	34.15	0.58	2.49	26.99	113.6	0.826
					600	4.78	34.24	0.38	2.60	27.12	101.8	0.934
					700	4.43	34.32	0.38	2.67	27.22	92.8	1.031
					800	4.16	34.39	0.42	2.73	27.31	85.2	1.121
					1000	3.72	34.48	0.57	-	27.42	75.4	1.282

604 HORIZON; April 7, 1949; 0604 GCT; 36°37'N, 125°30'W; sounding, missing; wind 150°, force 2; weather, cloudy; sea, rough; wire angle, 8°.

0	11.8	32.83	5.95	0.46	0	11.8	32.83	5.95	0.46	24.96	301.0	0.000
10	10.44	32.74	5.85	0.53	10	10.44	32.74	5.85	0.53	25.14	283.9	0.029
24	10.66	32.92	5.90	0.50	20	10.55	32.83	5.87	0.52	25.19	279.6	0.057
48	11.19	33.10	6.11	0.49	30	10.85	33.01	5.94	0.50	25.28	271.5	0.085
72	9.18r	33.08	4.94	0.83	50	11.18	33.10	6.09	0.50	25.29	270.7	0.139
96	9.20	33.26	4.49	0.97	75	10.22	33.09	4.89	0.90	25.45	256.2	0.205
145	8.24	33.68	3.30	1.54	100	9.05	33.28	4.39	1.22	25.79	224.0	0.265
194	7.85	33.89	2.80	1.71	150	8.18	33.71	3.24	1.56	26.26	179.9	0.366
293	6.60	34.04	1.82	2.08	200	7.80	33.90	2.71	1.73	26.46	161.1	0.451
392	5.86	34.14	1.19	2.34	250	7.18	33.99	2.18	1.92	26.62	146.6	0.529
589	4.88	34.25	0.42	2.65	300	6.52	34.05	1.78	2.10	26.76	134.0	0.598
888	3.98	34.42	0.31	2.69	400	5.81	34.14	1.16	2.37	26.92	119.8	0.725
1186	3.30	34.52	1.15r	-	500	5.27	34.21	0.70	2.57	27.04	108.8	0.839
					600	4.84	34.25	0.41	2.66	27.12	101.7	0.945
					700	4.51	34.31	0.31	2.71	27.21	94.3	1.043
					800	4.22	34.37	0.30	2.71	27.28	87.4	1.133
					1000	3.70	34.46	-	-	27.41	76.7	1.298

605 HORIZON; April 7, 1949; 0030 GCT; 36°24'N, 126°17'W; sounding, missing; wind, 145°, force 3; weather, overcast; sea, rough; wire angle, 12°.

0	12.7	32.98	5.95	0.50	0	12.7	32.98	5.95	0.50	24.91	305.5	0.000
10	11.81	32.95	5.90	0.39	10	11.81	32.95	5.90	0.39	25.05	292.0	0.030
24	11.48	32.92	5.95	0.41	20	11.55	32.93	5.94	0.40	25.09	289.1	0.059
48	10.48	32.79	5.97	0.53	30	11.23	32.88	5.98	0.42	25.10	287.4	0.088
72	10.01	33.29	5.30	0.89	50	10.46	32.79	5.97	0.54	25.17	281.3	0.145
96	9.19	33.40	5.08	1.19	75	9.89	33.30	5.30	0.92	25.67	235.1	0.209
142	8.26	33.73	3.32	1.58	100	9.09	33.42	4.88	1.23	25.89	214.2	0.265
189	7.68	33.93	2.74	1.79	150	8.16	33.77	3.20	1.62	26.31	175.2	0.363
288	6.64	34.02	1.85	2.15	200	7.55	33.94	2.63	1.84	26.53	154.7	0.445
388	5.80	34.11	1.14	2.35	250	7.01	33.99	2.16	2.03	26.64	144.4	0.520
584	4.74	34.27	0.33	2.80	300	6.53	34.03	1.75	2.18	26.74	135.8	0.590
879	3.94	34.40	0.31	3.01	400	5.71	34.12	1.06	2.40	26.92	119.8	0.717
1296	2.95	34.52	0.71	-	500	5.08	34.20	0.56	2.68	27.05	107.4	0.831
					600	4.68	34.28	0.30	2.83	27.16	97.6	0.933
					700	4.41	34.34	0.25	2.93	27.24	91.0	1.028
					800	4.15	34.37	0.27	2.99	27.29	86.6	1.117
					1000	3.64	34.44	0.41	-	27.40	77.3	1.281

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	
HORIZON; April 6, 1949; 1832 GCT; 36°11'N, 127°04'W; sounding, missing; wind, 180°, force 3; weather, overcast; sea, moderate; wire angle, 17°.													606
0	12.0	32.94	6.12	0.34	0	12.0	32.94	6.12	0.34	25.01	296.2	0.000	
9	11.84	32.94	6.16	0.40	10	11.84	32.94	6.16	0.41	25.04	293.3	0.030	
24	11.83	32.94	6.14	-	20	11.83	32.94	6.14	0.43	25.04	293.6	0.059	
46	11.28	32.84	6.15	0.44	30	11.74	32.93	6.14	0.45	25.05	292.7	0.088	
69	11.03	32.84	6.16	0.43	50	11.23	32.84	6.15	0.45	25.08	290.6	0.147	
91	10.80	32.77	6.09	0.48	75	10.98	32.83	6.16	0.44	25.11	287.8	0.219	
135	9.48	33.30	4.81	1.06	100	10.65	32.79	5.85	0.56	25.14	285.8	0.290	
178	8.00	33.77	3.98	1.51	150	8.72	33.55	4.50	1.24	26.05	199.8	0.412	
267	6.86	33.95	2.64	1.99	200	7.64	33.83	3.61	1.67	26.43	164.2	0.503	
367	6.01	34.05	1.53	2.24	250	7.03	33.92	2.90	1.92	26.59	149.8	0.581	
571	4.94	34.18	0.58	2.75	300	6.54	33.99	2.25	2.09	26.71	138.8	0.654	
873	5.01	34.42	0.34	2.86	400	5.79	34.08	1.24	2.38	26.87	123.9	0.785	
1284	3.06	34.52	0.75	-	500	5.26	34.14	0.76	2.65	26.99	113.8	0.904	
					600	4.84	34.20	0.53	2.78	27.08	105.4	1.014	
					700	4.51	34.28	0.43	2.84	27.18	96.6	1.115	
					800	4.21	34.36	0.37	2.86	27.28	88.1	1.207	
					1000	3.69	34.47	0.38	-	27.42	75.6	1.370	
HORIZON; April 6, 1949; 1241 GCT; 35°58'N, 127°51'W; sounding, missing; wind, 180°, force 1; weather, overcast; sea, moderate; wire angle, 5°.													607
0	12.6	32.95	6.07	-	0	12.6	32.95	6.07	(0.48)	24.91	305.8	0.000	
10	12.12	32.92	6.17	0.49	10	12.12	32.92	6.17	0.49	24.97	299.6	0.030	
25	12.00	32.92	6.01	0.39	20	12.02	32.92	6.04	0.41	24.99	298.2	0.060	
50	11.95	32.92	6.13	0.41	30	11.98	32.92	6.04	0.38	25.00	297.6	0.090	
75	11.82	32.90	5.91	-	50	11.95	32.92	6.13	0.41	25.01	297.4	0.149	
100	11.00	33.01	5.70	0.59	75	11.82	32.90	5.91	0.48	25.01	297.2	0.224	
150	9.32	33.31	4.75	1.13	100	11.00	33.01	5.70	0.59	25.24	276.0	0.296	
200	8.70	33.78	2.73	1.98	150	9.32	33.31	4.75	1.13	25.76	227.2	0.422	
300	7.88	34.05	1.62	2.46	200	8.70	33.78	2.73	1.98	26.23	183.3	0.524	
400	6.94	34.05	1.28	2.52	250	8.28	34.00	1.91	2.28	26.47	161.7	0.610	
600	5.42	34.16	0.55	2.91	300	7.88	34.05	1.62	2.46	26.57	152.7	0.689	
900	4.11	34.38	0.34	3.03	400	6.94	34.05	1.28	2.52	26.70	141.1	0.835	
1200	3.27	34.43	0.52	-	500	6.11	34.08	0.86	2.73	26.83	129.2	0.971	
					600	5.42	34.16	0.55	2.91	26.98	115.6	1.093	
					700	4.89	34.25	0.43	2.98	27.12	103.2	1.203	
					800	4.47	34.33	0.37	3.01	27.23	93.5	1.301	
					1000	3.80	34.40	0.37	-	27.35	82.1	1.477	
HORIZON; April 6, 1949; 0650 GCT; 35°44'N, 128°37'W; sounding, missing; wind, 260°, force 1; weather, overcast; sea, moderate; wire angle, 5°.													608
0	12.8	33.00	6.08	-	0	12.8	33.00	6.08	(0.34)	24.91	306.0	0.000	
10	12.17	32.99	6.04	0.35	10	12.17	32.99	6.04	0.35	25.02	295.0	0.030	
25	11.92	32.95	5.96	0.51	20	11.96	32.96	5.99	0.47	25.03	294.0	0.060	
49	11.83	32.97	6.00	0.36	30	11.88	32.95	5.96	0.51	25.04	293.7	0.089	
74	11.79	32.95	5.96	0.39	50	11.82	32.97	6.00	0.36	25.06	291.8	0.148	
99	10.74	33.04	5.43	0.59	75	11.79	32.95	5.98	0.39	25.06	292.9	0.221	
148	9.22	33.44	4.36	1.22	100	10.73	33.04	5.42	0.59	25.32	268.8	0.291	
198	8.88	33.84	2.47	1.76	150	9.20	33.45	4.30	1.30	25.89	214.5	0.412	
297	7.90	34.05	1.78	2.04	200	8.87	33.85	2.45	1.77	26.26	180.8	0.510	
396	6.94	34.11	1.32	2.04r	250	8.41	33.99	2.09	1.93	26.44	164.3	0.596	
594	5.64	34.23	0.51	2.68	300	7.87	34.05	1.79	2.06	26.57	152.7	0.676	
891	4.22	34.41	0.34	2.75	400	6.91	34.11	1.31	2.34	26.75	136.3	0.820	
1188	3.41	34.51	0.64	-	500	6.21	34.16	0.81	2.55	26.88	124.5	0.950	
					600	5.61	34.23	0.48	2.68	27.02	112.9	1.069	
					700	5.05	34.30	0.37	2.72	27.14	101.8	1.177	
					800	4.57	34.36	0.33	2.74	27.24	92.4	1.274	
					1000	3.88	34.45	0.38	-	27.38	79.5	1.446	

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OBSERVED					INTERPOLATED					COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m
609	HORIZON; April 6, 1949; 0046 GCT; 35°31'N, 129°24'W; sounding, missing; wind, 120°, force 2; weather, partly cloudy; sea, moderate; wire angle, 0°.											
0	14.1	32.86	5.91	0.31	0	14.1	32.86	5.91	0.31	24.53	341.5	0.000
14	12.52	32.90	5.80	0.35	10	12.62	32.89	5.85	0.34	24.86	310.9	0.033
40	12.40	32.86	5.66	0.34	20	12.48	32.89	5.79	0.35	24.88	308.5	0.064
65	12.39	33.03	5.75	0.33	30	12.43	32.87	5.72	0.35	24.87	309.6	0.094
90	11.35	33.06	5.42	0.53	50	12.40	32.89	5.66	0.33	24.90	307.8	0.156
130	9.49	33.42	4.65	0.96	75	12.20	33.04	5.71	0.36	25.05	293.7	0.231
140	8.94	33.42	4.62	1.14	100	10.87	33.14	5.17	0.67	25.37	263.5	0.301
190	8.08	33.73	3.89	1.49	150	8.68	33.49	4.55	1.22	26.01	203.7	0.418
290	6.95	33.82	2.56	2.04	200	7.97	33.74	3.73	1.55	26.31	175.4	0.513
390	5.94	34.07	1.58	2.36	250	7.41	33.78	3.03	1.81	26.42	165.5	0.598
590	4.85	34.25	0.54	2.90	300	6.83	33.83	2.45	2.03	26.54	154.3	0.678
890	3.86	34.38	0.34	3.04	400	5.87	34.08	1.49	2.40	26.86	125.0	0.817
1190	3.16	34.36r	0.68	-	500	5.28	34.18	0.80	2.72	27.02	111.1	0.936
					600	4.81	34.26	0.54	2.91	27.13	100.7	1.042
					700	4.44	34.31	0.43	2.98	27.21	93.7	1.139
					800	4.12	34.35	0.38	3.01	27.28	87.8	1.230
					1000	3.58	(34.41)	0.40	-	(27.38)	(78.9)	(1.396)
610	HORIZON; April 5, 1949; 1932 GCT; 35°18'N, 130°11'W; sounding, missing; wind, 110°, force 1; weather, cloudy; sea, moderate; wire angle, 2°.											
0	14.1	33.28	6.05	-	0	14.1	33.28	6.05	(0.30)	24.86	310.5	0.000
10	13.05	33.30	6.01	0.30	10	13.05	33.30	6.01	0.30	25.09	288.9	0.030
25	13.31	33.42	6.00	0.30	20	13.22	33.37	6.01	0.30	25.11	287.1	0.059
50	13.57	33.53	5.85	0.30	30	13.38	33.44	6.00	0.30	25.13	285.2	0.087
75	13.68	33.57	5.92	0.31	50	13.57	33.53	5.85	0.30	25.16	282.7	0.144
100	14.16	33.75	5.68	-	75	13.68	33.57	5.92	0.31	25.17	282.8	0.215
150	11.14	33.53	5.24	0.70	100	14.16	33.75	5.68	0.35	25.21	279.7	0.285
200	9.18	33.79	4.71	1.06	150	11.14	33.53	5.24	0.70	25.63	240.7	0.416
300	7.44	33.96	3.88	1.70	200	9.18	33.79	4.71	1.06	26.16	189.9	0.523
400	6.20	34.00	2.08	2.19	250	8.26	33.90	4.36	1.40	26.39	168.7	0.612
600	4.87	34.19	0.59	2.75	300	7.44	33.96	3.88	1.70	26.56	153.4	0.693
900	3.92	34.38	0.38	3.06	400	6.20	34.00	2.08	2.19	26.76	135.2	0.837
1208	3.17	34.49	0.80	-	500	5.34	34.10	0.92	2.55	26.94	117.9	0.964
					600	4.87	34.19	0.59	2.75	27.07	106.4	1.076
					700	4.52	34.27	0.49	2.90	27.17	97.3	1.178
					800	4.20	34.33	0.43	3.00	27.26	90.0	1.271
					1000	3.66	34.42	0.44	-	27.38	79.2	1.441
701	HORIZON; April 8, 1949; 0920 GCT; 35°41'N, 121°50'W; sounding, missing; wind, 345°, force 4; weather, overcast; sea, rough; wire angle, 46°.											
0	11.5	33.68	5.76	1.02	0	11.5	33.68	5.76	1.02	25.68	232.5	0.000
7	11.03	33.57	5.85	0.99	10	11.01	33.57	5.83	0.99	25.68	232.4	0.023
16	10.99	33.57	5.73	0.99	20	10.88	33.57	5.62	1.00	25.71	230.2	0.046
32	10.47	33.55	5.32	1.09	30	10.52	33.55	5.37	1.09	25.75	226.1	0.069
46	10.14	33.66	5.08	1.28	50	10.03	33.68	4.89	1.30	25.94	208.8	0.113
60	9.76	33.71	3.92	1.32	75	9.26	33.75	3.34	1.46	26.12	191.9	0.163
87	8.97	33.80	3.04	1.72	100	8.77	33.88	2.84	1.78	26.30	175.1	0.209
114	8.66	33.95	2.60	1.81	150	8.53	34.03	2.09	1.98	26.45	161.5	0.292
168	8.42	34.07	1.90	2.07	200	8.12	34.11	1.63	2.23	26.58	150.3	0.371
223	7.85	34.13	1.46	2.32	250	7.61	34.15	1.33	2.37	26.68	140.9	0.443
349	6.81	34.20	0.88	2.56	300	7.20	34.18	1.08	2.47	26.77	133.6	0.512
507	5.76	34.27	0.43	2.82	400	6.45	34.22	0.70	2.65	26.90	121.9	0.640
					500	5.80	34.26	0.44	2.81	27.01	111.8	0.757

OBSERVED					INTERPOLATED					COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P µg at/L	Z m	T °C	S ‰	O_2 ml/L	PO_4-P µg at/L	σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m

HORIZON, April 8, 1949, 1545 GCT: 35°25'N, 122°35'W; sounding, missing; wind, 340°, force 4; weather, cloudy; sea, rough; wire angle, 20°. 702

0	12.5	33.15	6.10	0	12.5	33.15	6.10	25.08	289.4	0.000
10	12.06	33.15	6.35	10	12.06	33.15	6.35	25.16	281.7	0.029
24	12.03	33.22	6.14	20	12.04	33.19	6.26	25.20	278.6	0.057
48	11.22	33.35	5.65	30	11.93	33.25	6.01	25.26	272.4	0.084
71	10.80	33.46	5.09	50	11.18	33.36	5.57	25.49	251.6	0.136
94	9.74	33.57	3.53	75	10.67	33.48	4.36	25.67	234.5	0.197
141	8.98	33.86	3.22	100	9.60	33.61	3.50	25.95	208.0	0.253
190	8.40	34.02	2.14	150	8.88	33.90	2.95	26.30	176.2	0.349
287	6.54	34.04	1.85	200	8.28	34.03	2.10	26.49	158.6	0.432
385	6.69	34.22	1.04	250	7.50	34.04	1.99	26.62	147.3	0.509
583	5.46	34.27	0.33	300	6.88	34.05	1.75	26.71	138.7	0.580
886	4.18	34.42	0.39	400	6.63	34.23	0.91	26.88	123.7	0.711
1301	3.18	34.54	0.84	500	6.07	34.26	0.46	26.98	115.2	0.831
				600	5.36	34.28	0.32	27.09	105.9	0.941
				700	4.87	34.32	0.32	27.17	97.8	1.043
				800	4.46	34.38	0.35	27.27	89.6	1.137
				1000	3.84	34.46	0.50	27.39	78.3	1.305

HORIZON April 8, 1949: 2148 GCT; 35°10'N, 123°19'W; sounding, missing; wind, 315°, force 4; weather, cloudy; sea, moderate; wire angle, 20°. 703

0	13.5	33.10	5.79	0.40	0	13.5	33.10	5.79	0.40	24.84	311.7	0.000
9	12.87	33.10	5.82	0.45	10	12.80	33.10	5.82	0.45	24.98	298.8	0.030
24	11.96	33.10	5.91	0.46	20	12.02	33.10	5.87	0.46	25.13	284.8	0.060
47	11.81	33.10	5.82	0.46	30	11.91	33.10	5.91	0.46	25.15	283.0	0.088
71	11.56	33.13	5.82	0.48	50	11.80	33.10	5.82	0.46	25.17	281.4	0.145
113	10.14	33.33	4.86	0.96	75	11.50	33.14	5.82	0.50	25.26	274.0	0.214
237	6.20	34.05	2.00	1.95	100	10.67	33.26	5.36	0.81	25.50	251.2	0.280
379	6.54	34.14	0.98	2.60	150	9.35	33.60	3.59	1.27	25.99	205.8	0.394
474	6.95	34.26	0.51	2.75	200	8.67	33.91	2.50	1.60	26.34	173.2	0.488
572	5.14	34.22	0.41	2.83	250	8.01	34.07	1.83	2.07	26.56	152.5	0.569
662	4.14	34.42	0.36	2.95	300	7.33	34.10	1.43	2.36	26.69	141.3	0.643
1251	3.21	34.52	0.80	2.92	400	6.41	34.17	0.84	2.64	26.87	125.2	0.777
1547	2.79	34.57	1.13	-	500	5.78	34.25	0.45	2.77	27.01	112.3	0.896
					600	4.99	34.23	0.40	2.85	27.09	105.1	1.004
					700	4.60	34.29	0.39	2.91	27.18	96.8	1.105
					800	4.32	34.37	0.36	2.94	27.27	88.7	1.198
					1000	3.77	34.48	0.43	2.96	27.42	75.8	1.362

HORIZON: April 9, 1949: 0315 GCT; 34°54'N, 124°04'W; sounding, missing; wind, 320°, force 4; weather, overcast; sea, very rough; wire angle, 40°. 704

0	13.0	33.01	6.05	0	13.0	33.01	6.05	24.87	309.1	0.000
8	12.52	33.03	6.23	10	12.34	33.03	6.24	25.02	295.6	0.030
18	11.96	32.99	6.19	20	11.93	32.99	6.20	25.06	291.2	0.060
33	11.80	32.99	6.04	30	11.81	32.99	6.09	25.09	289.5	0.089
46	11.77	32.97	5.82	50	11.73	32.98	5.78	25.09	289.1	0.146
57	10.56	33.08	5.66	75	9.72	33.34	5.20	25.72	229.6	0.211
77	9.64	33.35	5.20	100	9.20	33.56	3.75	25.98	205.6	0.266
96p	11.64r	33.12r	5.48r	150	8.43	33.99	2.68	26.44	162.9	0.358
136	7.34r	33.98	2.77	200	7.87	34.01	2.41	26.54	153.9	0.437
195	7.92	34.01	2.42	250	7.32	34.02	2.24	26.63	146.3	0.512
363	6.29	34.05	1.63	300	6.81	34.03	2.07	26.70	139.4	0.583
666	4.76	34.31	0.30	400	6.03	34.07	1.38	26.84	127.8	0.717
1094	3.56	34.51	0.66	500	5.50	34.14	0.80	26.96	116.9	0.839
				600	5.05	34.23	0.39	27.08	105.9	0.951
				700	4.63	34.32	0.27	27.20	94.9	1.051
				800	4.30	34.38	0.31	27.28	87.7	1.142
				1000	3.76	34.47	0.53	27.41	76.5	1.307

SIO

CCOFI

4904

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
705	HORIZON; April 9, 1949; 0926 GCT; 34°39'N, 124°48'W; sounding, missing; wind, 315°, force 4; weather, overcast; sea, rough; wire angle, 38°.											
0	13.9	33.12	5.89	-	0	13.9	33.12	5.89	(0.33)	24.77	319.2	0.000
8	13.48	33.08	5.88	0.33	10	13.39	33.08	5.90	0.33	24.85	311.2	0.032
20	13.09	33.06	5.79	0.33	20	13.09	33.06	5.79	0.33	24.89	307.5	0.062
39	12.79	33.04	5.80	0.32	30	12.91	33.05	5.78	0.32	24.92	305.0	0.093
58	12.69	33.12	5.96	0.35	50	12.73	33.08	5.89	0.33	24.98	299.8	0.154
76	12.63	33.10	5.85	0.35	75	12.62	33.10	5.85	0.35	25.02	297.0	0.228
112	11.20	32.99	5.43	0.59	100	11.98	33.02	5.58	0.46	25.08	291.9	0.302
147	9.90	33.28	4.78	0.97	150	9.87	33.30	4.70	0.99	25.67	236.1	0.434
216	8.42	33.78	3.04	1.56	200	8.78	33.69	3.44	1.44	26.15	191.2	0.541
282	7.30	33.96	2.65	1.80	250	7.80	33.90	2.83	1.71	26.46	162.0	0.629
421	6.22	33.96r	1.30	2.27	300	7.09	34.00	2.50	1.89	26.64	145.3	0.706
702	4.76	34.31	0.30	2.67	400	6.36	34.13	1.49	2.22	26.85	127.4	0.842
1132	3.44	34.22	0.65	-	500	5.74	34.20	0.80	2.42	26.97	115.6	0.963
					600	5.23	34.25	0.47	2.56	27.08	106.7	1.074
					700	4.78	34.31	0.31	2.67	27.18	97.5	1.176
					800	4.40	34.36	0.31	-	27.26	90.3	1.270
					1000	3.78	34.45	0.49	-	27.39	77.9	1.439
706	HORIZON; April 9, 1949; 1501 GCT; 34°23'N, 125°33'W; sounding, missing; wind, 330°, force 3; weather, overcast; sea, rough; wire angle, 20°.											
0	13.0	32.83	6.10		0	13.0	32.83	6.10		24.73	322.3	0.000
9	12.44	32.81	6.08		10	12.44	32.81	6.08		24.83	313.7	0.032
23	11.81	32.84	6.09		20	11.88	32.84	6.07		24.96	301.4	0.063
47	11.57	32.77	6.01		30	11.73	32.82	6.07		24.97	300.6	0.093
70	11.41	32.94	6.05		50	11.56	32.77	6.01		24.96	301.6	0.153
93	11.32	32.92	5.96		75	11.39	32.94	6.05		25.12	286.7	0.226
139	9.33	33.31	4.52		100	11.27	32.94	5.82		25.15	285.1	0.298
185	8.45	33.78	3.08		150	9.08	33.56	3.92		26.00	204.6	0.421
280	7.16	33.91	2.16		200	8.22	33.81	2.86		26.33	174.1	0.515
376	6.06	33.04r	1.72		250	7.53	33.87	2.35		26.48	160.3	0.598
568	5.14	34.04	0.43		300	6.89	33.93	2.05		26.61	147.9	0.676
853	4.02	34.34	0.31		400	5.90	34.00	1.51		26.80	131.0	0.815
1259	3.06	34.52	0.85		500	5.42	34.02	0.75		26.87	124.9	0.943
					600	4.98	34.06	0.37		26.96	117.5	1.064
					700	4.55	34.17	0.26		27.09	105.2	1.175
					800	4.18	34.29	0.26		27.23	92.7	1.274
					1000	3.62	34.42	0.47		27.38	78.7	1.447
707	HORIZON; April 9, 1949; 2025 GCT; 34°02'N, 126°34'W; sounding, missing; wind, 315°, force 2; weather, overcast; sea, rough; wire angle, 21°.											
0	14.0	33.31	5.76		0	14.0	33.31	5.76		24.90	306.3	0.000
9	13.44	33.17	5.79		10	13.43	33.17	5.79		24.91	305.5	0.031
23	13.38	33.31	5.73		20	13.39	33.30	5.75		25.02	295.3	0.061
47	13.13	33.30	5.82		30	13.31	33.31	5.75		25.04	293.6	0.090
70	12.98	33.30	5.76		50	13.12	33.30	5.81		25.07	291.1	0.148
93	12.69	33.28	5.74		75	12.92	33.30	5.75		25.11	288.0	0.221
139	10.20	33.31	5.17		100	12.40	33.28	5.71		25.20	280.5	0.292
186	8.62	33.57	4.48		150	9.73	33.34	4.98		25.72	230.9	0.420
281	7.43	33.98	3.52		200	8.41	33.67	4.28		26.19	187.3	0.525
378	6.34	33.86r	3.35		250	7.76	33.90	3.74		26.47	161.5	0.611
578	4.89	34.22	0.68		300	7.21	34.03	3.44		26.65	144.8	0.689
879	3.92	34.38	0.32		400	6.14	34.12	3.05		26.86	125.3	0.823
					500	5.33	34.18	1.00		27.01	111.9	0.942
					600	4.78	34.23	0.63		27.11	102.6	1.049
					700	4.34	34.28	0.47		27.20	94.5	1.148
					800	4.04	34.34	0.36		27.28	87.5	1.239
					1000	(3.38)	(34.44)	-		(27.38)	(79.6)	(1.406)

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

HORIZON; April 10, 1949; 0138 GCT; 33°45'N, 127°19'W; sounding, missing; wind, 315°, force 2; weather, overcast; sea, rough; wire angle, 19°. 708

0	14.05	33.40	5.48	0	14.0	33.40	5.48	24.96	300.7	0.000
9	13.93	33.42	5.32	10	13.92	33.42	5.32	25.00	296.8	0.030
19	13.86	33.53	5.42	20	13.86	33.53	5.43	25.10	287.8	0.059
33	13.95	33.49	5.41	30	13.93	33.50	5.35	25.06	291.7	0.088
48	13.95	33.51	5.28	50	13.95	33.52	5.30	25.07	291.2	0.146
71	14.29	33.66	5.28	75	14.28	33.66	5.30	25.11	288.0	0.219
171	9.76	33.58	4.59	100	13.58	33.64	5.21	25.24	276.3	0.289
273	7.52	33.96	3.26	150	10.75	33.59	4.83	25.74	229.4	0.416
373	6.52	34.04	1.75	200	8.93	33.66	4.30	26.10	195.7	0.522
567	4.94	34.13	0.66	250	7.83	33.89	3.65	26.45	163.0	0.611
861	3.96	34.36	0.30	300	7.23	33.99	2.79	26.61	148.0	0.690
1157	3.29	34.49	0.68	400	6.25	34.05	1.47	26.79	132.1	0.829
				500	5.36	34.10	0.88	26.94	118.1	0.954
				600	4.78	34.15	0.55	27.05	108.4	1.067
				700	4.43	34.24	0.35	27.16	98.8	1.171
				800	4.13	34.32	0.28	27.25	90.2	1.266
				1000	3.62	34.43	0.40	27.39	78.0	1.435

HORIZON; April 5, 1949; 0336 GCT; 33°19'N, 128°32'W; sounding, missing; wind, 180°, force 1; weather, overcast; sea, moderate; wire angle, 4°. 710

0	15.0	33.66	5.37	0.25	0	15.0	33.66	5.37	0.25	24.96	300.7	0.000
10	14.62	33.71	5.58	0.28	10	14.62	33.71	5.58	0.28	25.08	289.5	0.030
25	14.61	33.69	5.30	0.27	20	14.62	33.69	5.40	0.27	25.07	291.1	0.059
50	9.17r	33.71	5.38	0.29	30	14.60	33.69	5.31	0.27	25.07	291.2	0.088
75	14.28	33.62	5.55	0.28	50	14.54	33.71	5.38	0.29	25.10	289.1	0.146
100	14.10	33.62	5.42	0.29	75	14.28	33.62	5.55	0.28	25.08	290.9	0.218
150	11.88	33.42	5.06	0.64	100	14.10	33.62	5.42	0.29	25.12	287.9	0.290
200	9.62	33.73	4.59	1.10	150	11.88	33.42	5.06	0.64	25.41	261.3	0.428
300	7.69	33.95	3.48	1.67	200	9.62	33.73	4.59	1.10	26.04	201.5	0.544
400	6.45	33.95	1.81	2.20	250	8.50	33.89	4.07	1.41	26.35	173.1	0.637
600	4.74	34.14	0.67	2.81	300	7.69	33.95	3.48	1.67	26.53	156.1	0.719
900	4.04	34.40	0.38	3.00	400	6.45	33.95	1.81	2.20	26.69	141.9	0.868
1200	3.34	34.51	-	-	500	5.43	34.03	1.01	2.64	26.88	124.2	1.001
					600	4.74	34.14	0.67	2.81	27.05	108.8	1.117
					700	4.46	34.24	0.48	2.91	27.16	99.0	1.221
					800	4.25	34.33	0.39	2.97	27.25	91.2	1.316
					1000	3.81	34.44	-	-	27.38	79.4	1.487

HORIZON; March 30, 1949; 0042 GCT; 33°50'N, 120°40'W; sounding, missing; wind, 315°, force 3; weather, clear; sea, rough; wire angle, 30°. 801

0	12.2	33.44	6.20	0.60	0	12.2	33.44	6.20	0.60	25.36	262.5	0.000
9	11.48	33.42	5.30	0.70	10	11.47	33.42	5.30	0.70	25.48	251.2	0.026
21	11.18	33.51	5.39	0.83	20	11.20	33.51	5.38	0.82	25.60	240.3	0.050
42	11.05	33.55	5.54	0.93	30	11.11	33.53	5.50	0.88	25.63	237.7	0.074
63	10.74	33.62	5.26	1.11	50	10.92	33.58	5.48	1.01	25.71	230.8	0.121
84	10.60	33.62	4.97	1.20	75	10.66	33.62	5.10	1.15	25.78	224.2	0.178
124	9.20	33.82	2.83	1.70	100	10.06	33.67	4.56	1.50	25.93	210.9	0.232
164	8.55	33.94	2.54	1.90	150	8.75	33.91	2.63	1.84	26.32	173.7	0.328
246	7.50	34.05	1.85	2.21	200	8.12	34.00	2.25	2.06	26.49	158.5	0.412
329	6.79	34.11	1.34	2.39	250	7.47	34.05	1.83	2.22	26.63	146.0	0.488
503	6.24	34.33	0.47	2.81	300	7.00	34.09	1.52	2.33	26.72	137.5	0.558
756	4.89	34.42	0.34	2.97	400	6.54	34.20	0.89	2.59	26.87	124.7	0.689
1049	3.82	34.49	0.60	-	500	6.27	34.33	0.49	2.81	27.01	112.7	0.808
					600	5.73	34.38	0.40	2.90	27.11	103.5	0.917
					700	5.19	34.41	0.36	2.95	27.21	95.1	1.015
					800	4.70	34.43	0.35	-	27.28	88.8	1.108
					1000	3.94	34.48	0.54	-	27.40	78.0	1.275

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

802 HORIZON; March 31, 1949; 0124 GCT; 33°32'N, 121°22'W; sounding, missing; wind, 315°, force 7; weather, cloudy; sea, very rough; wire angle, 55°.

0	12.4	-	5.70	0.51	0	12.4	(33.26)	5.70	0.51	(25.18)	(279.7)	0.000
6	12.34	33.28	5.72	0.46	10	12.33	33.35	5.80	0.45	25.27	271.8	(0.028)
14	12.33	33.37	5.84	0.45	20	12.35	33.35	5.82	0.45	25.26	272.4	0.055
28	12.37	33.31	5.76	0.48	30	12.38	33.31	5.75	0.48	25.22	276.4	0.082
41	12.32	33.33	5.70	0.47	50	12.12	33.31	5.65	0.50	25.27	271.9	0.132
54	11.92	33.31	5.59	0.58	75	10.00	33.47	4.18	1.10	25.78	224.3	0.194
77	9.85	33.48	4.07	1.15	100	8.90	33.70	3.15	1.50	26.14	190.6	0.246
102	8.87	34.38[a]	3.12	1.54	150	8.33	34.01	2.57	1.83	26.47	159.9	0.333
151	8.31	34.22	2.57	1.83	200	7.84	34.07	2.00	1.96	26.57	150.7	0.411
200	7.84[b]	34.07	2.00	1.96	250	7.25	34.06	1.68	2.31	26.67	142.3	0.484
304	6.74	34.05	1.38	2.45	300	6.77	34.07	1.41	2.44	26.74	136.0	0.553
487	5.97[c]	34.02	0.60	2.54	400	6.28	34.14	0.85	2.54	26.86	125.7	0.684
888	4.58	-	0.50	-	500	5.93	34.23	0.59	(2.53)	26.98	115.5	0.805
					600	5.58	34.27	0.54	-	27.05	109.6	0.918
					700	5.23	34.31	0.51	-	27.12	103.3	1.024
					800	4.88	34.35	0.50	-	27.20	96.9	1.125
					1000	(4.25)	(34.43)	-	-	(27.33)	(85.3)	(1.307)

803 HORIZON; April 2, 1949; 1734 GCT; 33°15'N, 122°05'W; sounding, missing; wind, 315°, force 5; weather, cloudy; sea, very rough; wire angle, 60°.

0	12.5	33.24	6.05	0.47	0	12.5	33.24	6.05	0.47	25.16	281.9	0.000
5	12.43	33.24	5.94	0.41	10	12.43	33.18	6.09	0.40	25.11	286.2	0.028
12	12.45	33.12	6.12	0.39	20	12.44	33.06	5.90	0.47	25.02	295.5	0.058
22	12.44	33.06	5.88	0.47	30	12.39	33.20	5.85	0.40	25.14	284.6	0.086
32	12.38	33.21	5.87	0.40	50	12.30	33.18	5.94	0.43	25.14	284.6	0.143
42	12.28	33.17	5.96	0.42	75	12.23	33.21	5.84	0.43	25.18	281.8	0.214
61	12.41	33.22	5.86	0.43	100	10.87	33.22	5.52	0.77	25.44	257.5	0.282
79	12.08	33.21	5.83	0.43	150	9.00	33.46	4.00	1.40	25.94	210.7	0.399
119	9.82	33.26	4.83	1.07	200	7.68	33.97	1.78	2.16	26.53	154.1	0.490
163	8.74	33.60	3.45	1.54	250	6.37	34.15	1.12	2.48	26.86	124.0	0.560
263	6.26	34.16	1.03	2.54	300	6.14	34.17	0.85	2.62	26.90	120.4	0.620
570	5.37	34.13	0.35	2.84	400	5.93	34.15	0.53	2.74	26.91	120.5	0.741
892	4.24	34.38	0.45	-	500	5.63	34.13	0.38	2.81	26.93	119.1	0.861
					600	5.23	34.14	0.33	(2.85)	26.99	114.8	0.978
					700	4.78	34.22	0.34	-	27.11	104.1	1.087
					800	4.43	34.33	0.39	-	27.23	93.0	1.186
					1000	(4.03)	(34.39)	-	-	(27.32)	(85.6)	(1.364)

807 HORIZON; April 3, 1949; 1512 GCT; 32°05'N, 124°55'W; sounding, missing; wind, 315°, force 4; weather, cloudy; sea, rough; wire angle 52°.

0	14.3	-	5.76	0.31	0	14.3	(33.37)	5.76	0.31	(24.89)	(307.6)	0.000
6	13.85	33.37	5.67	0.33	10	13.85	33.37	5.52	0.31	24.98	299.1	(0.030)
14	13.85	-	5.48	0.28	20	13.85	33.36	5.53	0.29	24.97	300.0	0.060
26	13.85	33.35	5.59	0.32	30	13.85	33.33	5.65	0.31	24.95	302.6	0.090
37	13.84	33.31	5.69	0.20	50	13.85	33.40	5.55	0.37	25.00	297.8	0.150
48	13.84	33.40	5.58	0.36	75	13.82	33.33	5.39	0.43	24.95	303.2	0.226
68	13.85	33.31	5.44	0.41	100	12.60	33.45	5.29	0.61	25.29	271.5	0.298
90	13.36	-	5.36	0.51	150	10.50	33.62	4.06	1.00	25.81	222.8	0.421
219	8.78	33.78	3.12	1.48	200	9.21	33.75	3.32	1.36	26.13	193.5	0.525
460	6.14	34.04	1.04	2.23	250	8.24	33.82	2.75	1.64	26.33	174.5	0.617
794	4.54	34.25	0.33	2.88	300	7.56	33.88	2.25	1.86	26.48	160.7	0.701
1143	3.48	34.38	0.66	2.98	400	6.59	33.99	1.41	2.10	26.70	140.8	0.851
1413	2.92	34.49	0.89	-	500	5.89	34.08	0.85	2.38	26.86	126.2	0.985
					600	5.34	34.14	0.55	2.63	26.98	116.2	1.106
					700	4.88	34.20	0.39	2.79	27.08	106.9	1.218
					800	4.52	34.26	0.31	2.88	27.16	99.3	1.321
					1000	3.87	34.33	0.47	2.96	27.29	88.2	1.509

a) Assumption made that salinity samples from 102 to 888 meters, were taken in reverse of this order of depths, and were so used.

b) Middle thermometer reading of 6.78° rejected.

c) Middle thermometer reading of 6.12° rejected.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

HORIZON; April 3, 1949; 2144, 2217 GCT; 31°47'N, 125°38'W; sounding, missing; wind, 360°, force 2; weather, cloudy; sea, very rough; wire angle, 20°, 35°. 808

0	14.2	33.28	5.69	0.32	0	14.2	33.28	5.69	0.32	24.84	312.3	0.000
9	13.69	33.38	5.35	0.34	10	13.69	33.36	5.34	0.34	25.00	296.7	0.030
23	13.63	-	5.33	0.35	20	13.64	33.36	5.34	0.35	25.01	296.0	0.060
46	13.64	33.35	5.39	0.36	30	13.63	33.36	5.35	0.36	25.02	296.1	0.090
68	13.15	33.24	5.43	0.33	50	13.62	33.34	5.40	0.36	25.00	297.7	0.149
107	13.86	33.31	5.40	0.30	75	13.21	33.24	5.46	0.32	25.01	297.9	0.224
216	9.02	34.07	1.54	1.71	100	13.78	33.29	5.43	0.29	24.93	305.7	0.299
340	8.06	34.14	1.23	1.90	150	12.02	33.50	3.87	1.06	25.44	258.3	0.441
					200	9.43	34.01	1.67	1.62	26.29	177.7	0.549
425	7.78	34.29r	0.97	2.22	250	8.62	34.11	1.41	1.77	26.50	158.7	0.633
511	6.90	34.16	0.33	2.37	300	8.26	34.13	1.31	1.83	26.57	152.7	0.711
783	4.74	34.27	0.64	2.64	400	7.87	34.15	1.04	2.15	26.65	147.2	0.861
1154	3.54	34.45	1.03	2.82	500	7.02	34.16	0.35	2.35	26.77	135.6	1.002
1445	2.95	34.56	-	-	600	5.98	34.18	0.42	2.49	26.93	121.4	1.131
					700	5.23	34.23	0.53	2.58	27.06	109.2	1.246
					800	4.66	34.28	0.64	2.65	27.17	99.4	1.351
					1000	3.93	34.38	0.86	2.76	27.32	85.2	1.535

HORIZON; April 4, 1949; 0351 GCT; 31°29'N, 126°20'W; sounding, missing; wind, 360°, force 2; weather, overcast; sea, rough; wire angle, 18°. 809

0	14.1	33.37	5.44	0.39	0	14.1	33.37	5.44	0.39	24.93	303.9	0.000
10	13.72	33.35	5.39	0.33	10	13.72	33.35	5.39	0.33	24.99	298.0	0.030
24	13.66	33.35	5.15	0.32	20	13.68	33.35	5.20	0.32	25.00	297.4	0.060
48	13.66	33.39	5.17	0.30	30	13.67	33.36	5.16	0.32	25.01	296.8	0.090
72	13.57	33.37	5.10	0.31	50	13.67	33.39	5.19	0.30	25.03	295.0	0.149
94	12.72	33.28	5.03	0.39	75	13.51	33.36	5.11	0.32	25.04	294.8	0.222
140	11.49	33.53	4.45	0.73	100	12.49	33.29	5.00	0.43	25.19	281.1	0.294
186	9.10	33.60	3.91	0.99	150	10.82	33.55	4.32	0.76	25.70	233.5	0.424
283	7.72	34.01	2.82	1.69	200	8.87	33.63	3.74	1.09	26.09	197.0	0.531
383	6.49	34.04	1.76	2.22	250	8.15	33.86	3.15	1.44	26.38	170.1	0.622
581	5.40	34.23	0.50	2.81	300	7.48	34.02	2.63	1.78	26.60	149.2	0.703
870	4.20	34.42	0.47	2.74	400	6.36	34.05	1.45	2.30	26.78	133.4	0.843
1277	3.33	34.51	0.90	-	500	5.78	34.14	0.67	2.72	26.92	120.3	0.970
					600	5.30	34.25	0.48	2.82	27.07	107.4	1.084
					700	4.83	34.32	0.44	2.82	27.18	97.3	1.186
					800	4.43	34.38	0.44	2.78	27.27	89.3	1.280
					1000	3.85	34.47	0.56	-	27.40	77.7	1.447

HORIZON; April 4, 1949; 1033 GCT; 31°11'N, 127°03'W; sounding, missing; wind, 135°, force 1; weather, clear; sea, rough; wire angle, 27°. 810

0	14.7	33.28	5.83	0.36	0	14.7	33.28	5.83	0.36	24.73	322.5	0.000
13	14.39	33.37	5.62	-	10	14.43	33.35	5.66	0.36	24.84	312.0	0.032
26	14.37	33.49	5.66	0.36	20	14.38	33.46	5.64	0.36	24.94	303.1	0.062
48	14.38	33.35	5.79	-	30	14.39	33.49	5.68	0.36	24.96	301.5	0.093
69	14.36	33.28	5.85	0.35	50	14.37	33.34	5.80	0.36	24.85	312.5	0.154
92	13.38	33.26	5.78	0.32	75	14.27	33.27	5.86	0.34	24.82	316.3	0.233
134	10.98	33.26	5.04	0.70	100	12.79	33.26	5.64	0.33	25.11	288.8	0.308
176	9.34	33.51	4.31	1.15	150	10.26	33.32	4.73	0.92	25.62	241.0	0.441
262	7.86	33.96	3.20	1.45	200	8.86	33.70	3.93	1.27	26.14	191.7	0.549
352	6.62	33.96	2.16	1.73	250	8.04	33.93	3.31	1.42	26.45	163.4	0.638
531	5.38	34.09	0.67	2.54	300	7.29	33.96	2.80	1.52	26.58	150.9	0.717
798	4.49	34.34	0.38	2.61	400	6.23	33.98	1.55	2.08	26.74	137.1	0.860
1085	3.62	34.38	0.87	-	500	5.58	34.06	0.79	2.50	26.88	123.8	0.991
					600	5.15	34.16	0.49	2.58	27.02	112.2	1.109
					700	4.80	34.27	0.37	2.61	27.14	100.7	1.215
					800	4.47	34.34	0.37	(2.61)	27.24	92.6	1.312
					1000	3.89	34.38	0.64	-	27.33	84.7	1.489

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

901 N. B. SCOFIELD; March 29, 1949; 1950 GCT; 32°40'N, 118°10'W; sounding, 1,020 fms; wind, 315°, force 3; weather, haze; sea, rough; wire angle, 0°.

0	13.86	33.57	5.72	0	13.86	33.57	5.72	25.13	284.6	0.000
10	13.65	33.42	5.45	10	13.65	33.42	5.45	25.06	291.4	0.029
25	13.51	33.55	5.70	20	13.55	33.52	5.47	25.16	282.4	0.058
50	13.46	33.58	5.75	30	13.49	33.56	5.73	25.20	278.8	0.086
75	12.84	33.51	5.57	50	13.46	33.58	5.75	25.22	277.0	0.141
100	11.36	33.44	4.11	75	12.84	33.51	5.57	25.29	271.3	0.210
150	9.48	33.80	2.89	100	11.36	33.44	4.11	25.52	249.4	0.275
200	8.97	34.13	2.18	150	9.48	33.80	2.89	26.12	193.2	0.380
300	7.63	34.20	1.53	200	8.97	34.13	2.18	26.48	160.0	0.473
400	6.86	-	0.72	250	8.27	34.17	1.86	26.62	147.3	0.551
600	5.50	34.40	0.32	300	7.63	34.20	1.53	26.72	138.2	0.622
900	4.35	34.49	0.47	400	6.86	34.28	0.72	26.89	123.2	0.752
1250	3.26	34.36r	0.94	500	6.13	34.35	0.44	27.04	109.4	0.869
				600	5.50	34.40	0.32	27.16	98.9	0.973
				700	5.07	34.44	0.32	27.24	91.5	1.068
				800	4.69	34.47	0.38	27.31	85.6	1.156
				1000	4.01	(34.51)	0.61	(27.42)	(76.6)	(1.319)

902 N. B. SCOFIELD; March 30, 1949; 0234, 0300 GCT; 32°25'N, 118°51'W; sounding, 450 fms; wind, 260°, force 3; weather, haze; sea, rough; wire angle, 5°, 10°.

0	13.90	33.69	5.88	0	13.90	33.69	5.88	25.22	276.4	0.000
10	13.76	33.49	5.82	10	13.76	33.49	5.82	25.09	288.6	0.028
25	-	33.42	5.93	20	13.64	33.43	5.91	25.07	290.8	0.057
49	13.34	33.49	5.78	30	13.53	33.42	5.91	25.08	289.8	0.086
80	11.73	33.55	4.18	50	13.33	33.49	5.77	25.18	281.2	0.143
				75	12.61	33.53	5.10	25.35	265.4	0.212
288	7.73	34.23	1.34	100	11.00	33.60	3.89	25.71	231.9	0.274
384	6.77	34.23	0.81	150	9.41	33.88	2.98	26.20	186.0	0.378
585	5.76	34.33	0.41	200	8.68	34.08	2.31	26.47	160.8	0.465
829	4.57	34.43	0.38	250	8.12	34.19	1.70	26.64	145.2	0.542
				300	7.59	34.23	1.22	26.75	135.3	0.611
				400	6.66	34.23	0.73	26.88	124.1	0.741
				500	6.14	34.28	0.51	26.99	114.8	0.861
				600	5.68	34.34	0.39	27.09	105.4	0.971
				700	5.18	34.38	0.35	27.18	97.2	1.072
				800	4.71	34.42	0.33	27.27	89.6	1.165

903 N. B. SCOFIELD; March 30, 1949; 0924 GCT; 32°04'N, 119°29'W; sounding, 1,010 fms; wind, 270°, force 3; weather, clear; sea, rough; wire angle, 7°.

0	13.7	33.71	5.46	0	13.7	33.71	5.46	25.26	272.6	0.000
10	13.77	33.62	5.69	10	13.77	33.62	5.69	25.19	279.1	0.028
25	-	33.66	5.73	20	13.75	33.65	5.73	25.22	276.7	0.055
50	13.70	33.55	5.67	30	13.74	33.65	5.73	25.22	277.1	0.083
74	11.16	33.49	4.41	50	13.70	33.55	5.67	25.13	285.5	0.139
99	-	-	3.94	75	11.16	33.49	4.40	25.59	242.2	0.205
148	9.27	33.93	3.02	100	10.32	33.64	3.90	25.86	215.3	0.262
198	8.40	34.00	2.27	150	9.23	33.93	2.96	26.26	179.5	0.361
296	7.02	34.25	1.18	200	8.38	34.00	2.24	26.45	162.4	0.446
394	6.48	34.27	0.58	250	7.55	34.12	1.62	26.67	142.2	0.523
591	5.94	34.36	0.36	300	6.99	34.25	1.15	26.85	125.5	0.589
889	4.72	34.38	0.38	400	6.45	34.27	0.56	26.94	118.2	0.711
1242	3.25	34.56	0.98	500	6.17	34.31	0.38	27.01	112.7	0.827
				600	5.93	34.36	0.33	27.08	107.4	0.937
				700	5.57	34.37	0.30	27.13	103.1	1.042
				800	5.13	34.37	0.30	27.18	98.8	1.143
				1000	4.23	34.41	0.44	27.32	86.4	1.328

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

N. B. SCOFIELD; March 30, 1949; 1527 GCT; 31°44'N, 120°13'W; sounding, 2,100 fms; wind, 292°, force 4; weather, cloudy; sea, very rough; wire angle, 15°. 904

0	12.71	33.57	5.91	0	12.71	33.57	5.91	25.36	262.6	0.000
10	13.79r	33.49	5.79	10	12.76	33.49	5.79	25.29	269.4	0.027
24	12.81	33.42	5.85	20	12.78	33.43	5.84	25.24	274.4	0.054
48	12.78	33.42	5.83	30	12.79	33.42	5.85	25.23	275.6	0.081
72	11.88	33.37	5.66	50	12.78	33.42	5.82	25.23	275.7	0.136
97	-	33.39	4.97	75	11.75	33.37	5.51	25.39	261.4	0.204
145	9.49	33.71	3.44	100	10.80	33.40	4.50	25.59	243.3	0.267
193	8.27	33.96	2.82	150	9.34	33.74	3.35	26.10	195.2	0.376
289	6.98	34.07	1.86	200	8.10	33.97	2.77	26.47	160.5	0.465
384	-	34.18	0.89	250	7.33	34.04	2.34	26.64	144.8	0.542
577	5.62	34.24	0.41	300	6.92	34.08	1.68	26.73	137.1	0.612
864	4.50	34.42	0.48	400	6.38	34.19	0.83	26.89	123.3	0.742
1208	3.49	34.54	0.88	500	5.93	34.22	0.51	26.97	116.4	0.862
				600	5.51	34.25	0.41	27.04	110.2	0.975
				700	5.08	34.32	0.40	27.15	100.6	1.081
				800	4.72	34.39	0.44	27.24	92.1	1.177
				1000	4.07	34.47	0.59	27.38	80.2	1.394

N. B. SCOFIELD; March 30, 1949; 2227 GCT; 31°26'N, 120°53'W; sounding, 2,100 fms; wind, 290°, force 5; weather, squally; sea, high; wire angle, 24°. 905

0	13.81	33.51	5.69	0	13.81	33.51	5.69	25.10	287.8	0.000
9	13.98	33.46	5.68	10	13.98	33.46	5.68	25.02	295.2	0.029
23	13.94	33.49	5.64	20	13.94	33.48	5.66	25.04	293.1	0.059
46	13.86	33.48	5.60	30	13.92	33.49	5.63	25.06	292.3	0.088
68	12.52	33.33	5.52	50	13.80	33.47	5.59	25.08	291.6	0.146
91	-	33.40	5.30	75	12.13	33.34	5.47	25.30	270.4	0.216
136	10.08	33.53	4.10	100	11.15	33.42	5.16	25.54	247.7	0.281
181	8.91	33.78	3.02	150	9.69	33.60	3.61	25.93	211.1	0.396
272	7.62	34.07	2.04	200	8.56	33.87	2.81	26.32	174.7	0.492
364	6.83	34.14	1.20	250	7.84	34.03	2.27	26.56	152.8	0.574
552	5.46	34.25	0.52	300	7.36	34.10	1.77	26.68	141.6	0.648
834	4.58	34.41	0.44	400	6.52	34.16	0.96	26.84	127.4	0.783
1228	-	34.54	0.91	500	5.78	34.22	0.59	26.99	114.5	0.904
				600	5.27	34.28	0.46	27.10	104.8	1.013
				700	4.94	34.35	0.43	27.19	96.6	1.114
				800	4.67	34.40	0.44	27.26	90.8	1.208
				1000	(4.10)	34.47	0.57	(27.38)	(80.5)	(1.379)

N. B. SCOFIELD; April 12, 1949; 1945 GCT; 31°10'N, 121°41'W; sounding, 2,080 fms; wind, 300°, force 4; weather, cloudy; sea, very rough; wire angle, 20°. 906

0	14.28	33.55	5.79	0	14.28	33.55	5.79	25.03	294.3	0.000
9	14.21	33.60	6.16	10	14.21	33.60	6.15	25.08	289.4	0.029
23	14.17	33.42	5.86	20	14.17	33.42	5.87	24.95	301.9	0.059
46	13.29	33.51	6.25	30	14.09	33.43	5.97	24.98	300.0	0.089
69	12.86	33.48	5.83	50	13.22	33.51	6.23	25.22	277.5	0.147
92	11.34	33.46	5.01	75	12.69	33.47	5.70	25.29	271.0	0.215
136	9.37	33.77	3.13	100	10.58	33.47	4.07	25.68	234.4	0.278
180	8.72	33.96	2.62	150	9.14	33.86	2.91	26.22	183.4	0.383
268	7.49	34.11	1.99	200	8.45	34.01	2.47	26.45	162.6	0.469
356	6.78	34.18	1.01	250	7.71	34.09	2.12	26.62	146.5	0.547
543	5.52	34.43	0.48	300	7.20	34.13	1.51	26.73	137.3	0.617
827	4.44	34.42	0.50	400	6.43	34.23	0.79	26.91	121.0	0.747
1164	3.48	34.56	0.86	500	5.74	34.38	0.53	27.12	102.0	0.858
				600	5.26	34.44	0.43	27.22	92.8	0.955
				700	4.87	34.43	0.42	27.26	89.9	1.047
				800	4.52	34.42	0.48	27.29	87.4	1.135
				1000	3.92	34.48	0.68	27.40	77.8	1.301

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
907	N.B. SCOFIELD; April 12, 1949; 1344 GCT; 30°53'N, 122°16'W; sounding, 2,200 fm; wind, 315°, force 3; weather, overcast; sea, very rough; wire angle, 6°.											
0	14.75	33.51	5.69		0	14.75	33.51	5.69		24.90	306.7	0.000
10	14.73	33.49	5.73		10	14.73	33.49	5.73		24.89	307.8	0.031
25	14.49	33.42	5.84		20	14.59	33.43	5.80		24.87	309.6	0.062
50	13.10	33.49	5.86		30	14.30	33.42	5.86		24.93	304.8	0.092
74	12.66	33.42	5.74		50	13.10	33.49	5.86		25.21	278.8	0.151
99	11.41	33.44	5.42		75	12.64	33.42	5.73		25.26	273.8	0.220
149	9.24	33.68	3.78		100	11.35	33.44	5.39		25.52	249.6	0.285
199	8.54	33.78	3.03		150	9.21	33.68	3.77		26.07	197.7	0.397
298	7.46	34.13	1.55		200	8.52	33.78	3.00		26.26	180.7	0.492
398	6.68	34.27	0.72		250	7.95	33.98	2.25		26.50	158.2	0.576
598	5.38	34.47	0.36		300	7.44	34.13	1.54		26.69	140.6	0.651
898	4.27	34.43	0.50		400	6.66	34.27	0.69		26.91	121.0	0.782
1246	3.32	34.51	1.00		500	5.96	34.39	0.47		27.10	104.2	0.895
					600	5.37	34.47	0.35		27.23	92.1	0.993
					700	4.93	34.46	0.34		27.28	88.3	1.083
					800	4.58	34.44	0.40		27.30	86.5	1.170
					1000	3.94	34.45	0.64		27.38	80.2	1.337
908	N. B. SCOFIELD; April 12, 1949; 0723 GCT; 30°28'N, 122°57'W; sounding, 2,175 fm; wind, 335°, force 2; weather, overcast; sea, very rough; wire angle, 12°.											
0	14.07	33.31	5.53		0	14.07	33.31	5.53		24.89	307.6	0.000
10	13.98	33.31	5.56		10	13.98	33.31	5.56		24.91	306.0	0.031
24	13.62	33.39	5.35		20	13.74	33.38	5.39		25.01	296.3	0.061
48	13.24	33.40	5.40		30	13.55	33.40	5.35		25.06	291.5	0.090
72	11.39	33.24	5.46		50	13.15	33.40	5.40		25.14	284.3	0.148
96	11.10	33.35	4.87		75	11.34	33.24	5.46		25.37	263.7	0.216
142	9.36	33.75	3.71		100	10.99	33.38	4.78		25.54	247.9	0.280
189	8.38	34.04	2.78		150	9.14	33.84	3.56		26.21	184.7	0.389
282	7.27	34.11	1.60		200	8.21	34.05	2.64		26.52	156.4	0.473
376	6.44	34.16	0.97		250	7.59	34.09	1.93		26.64	144.8	0.549
571	5.36	34.31	0.41		300	7.09	34.12	1.45		26.74	136.5	0.669
865	4.36	34.47	0.51		400	6.29	34.18	0.87		26.89	122.8	0.749
1202	3.36	34.49	0.67		500	5.72	34.25	0.53		27.02	111.2	0.866
					600	5.24	34.34	0.42		27.15	100.2	0.972
					700	4.88	34.41	0.42		27.24	91.4	1.067
					800	4.55	34.46	0.47		27.32	84.7	1.155
					1000	3.94	34.49	0.57		27.41	77.3	1.318
909	N. B. SCOFIELD; April 12, 1949; 0048 GCT; 30°08'N, 123°37'W; sounding, 2,350 fm; wind, 315°, force 2; weather, cloudy; sea, very rough; wire angle, 15°.											
0	14.80	33.40	5.69		0	14.80	33.40	5.69		24.80	315.8	0.000
10	14.82	33.42	5.86		10	14.82	33.42	5.86		24.82	314.7	0.032
24	14.28	33.39	5.75		20	14.41	33.40	5.76		24.89	308.1	0.063
49	13.69	33.39	5.93		30	14.04	33.39	5.78		24.96	301.9	0.093
73	13.64	33.39	5.80		50	13.69	33.39	5.92		25.03	295.6	0.153
97	13.36	33.34	5.74		75	13.64	33.38	5.79		25.03	295.8	0.227
146	10.32	33.40	5.23		100	13.30	33.34	5.73		25.07	292.7	0.300
193	9.30	33.73	3.81		150	10.19	33.41	5.04		25.69	233.3	0.432
286	7.72	34.07	2.41		200	9.13	33.78	3.66		26.16	190.0	0.538
378	6.44	34.09	1.50		250	8.24	34.00	2.82		26.47	161.2	0.625
558	5.37	34.33	0.53		300	7.48	34.08	2.29		26.65	144.8	0.702
843	4.28u	34.49	0.46		400	6.26	34.11	1.25		26.84	127.7	0.838
1182	3.38	34.60	0.91		500	5.65	34.25	0.67		27.03	110.6	0.958
					600	5.18	34.36	0.51		27.17	97.8	1.062
					700	4.75	34.43	0.47		27.27	88.3	1.154
					800	4.41	34.47	0.47		27.34	82.4	1.240
					1000	3.83	34.54	0.58		27.46	72.3	1.395

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	
N. B. SCOFIELD; April 11, 1949; 1824 GCT; 29°48'N, 124°14'W; sounding, 2,300 fm; wind, 315°, force 2; weather, cloudy; sea, high; wire angle, 25°.													910
0	14.59	33.55	5.36		0	14.59	33.55	5.36		24.96	300.4	0.000	
9	14.54	33.51	5.55		10	14.53	33.51	5.55		24.94	302.7	0.030	
23	14.44	-	5.54		20	14.46	33.52	5.55		24.97	300.4	0.060	
46	14.21	33.55	5.60		30	14.36	33.53	5.55		25.00	297.9	0.090	
69	14.16	33.46	5.56		50	14.20	33.54	5.60		25.04	294.5	0.149	
91	14.01	33.33	5.59		75	14.14	33.41	5.55		24.95	303.5	0.224	
136	12.13	33.37	5.54		100	13.98	33.33	5.59		24.92	306.2	0.300	
180	9.91	33.57	4.20		150	11.30	33.41	5.33		25.51	252.1	0.440	
264	8.16	34.02	2.92		200	9.35	33.70	3.87		26.06	199.3	0.553	
346	7.02	34.09	1.63		250	8.38	33.98	3.19		26.44	164.6	0.644	
511	5.76	34.23	0.52		300	7.60	34.06	2.34		26.62	148.1	0.722	
765	4.64	34.42	0.38		400	6.49	34.13	1.03		26.83	128.3	0.860	
1082	3.64	34.52	0.82		500	5.82	34.22	0.55		26.98	114.9	0.981	
					600	5.32	34.31	0.40		27.11	103.4	1.091	
					700	4.89	34.38	0.35		27.22	93.6	1.189	
					800	4.52	34.44	0.35		27.31	85.8	1.279	
					1000	3.88	34.51	0.63		27.43	75.2	1.440	
N. B. SCOFIELD; April 11, 1949; 1139 GCT; 29°32'N, 124°53'W; sounding, 2,300 fm; wind, 337°, force 1; weather, cloudy; sea moderate; wire angle, 8°.													911
0	15.27	33.62	5.68		0	15.27	33.62	5.68		24.87	309.4	0.000	
10	15.28	33.60	5.69		10	15.28	33.60	5.69		24.86	311.0	0.031	
25	15.22	33.64	5.65		20	15.26	33.62	5.66		24.87	309.6	0.062	
49	14.90	33.71	5.85		30	15.16	33.65	5.65		24.92	305.5	0.093	
74	15.09	33.78	5.77		50	14.90	33.71	5.84		25.02	296.3	0.153	
98	14.56	33.69	5.65		75	15.10	33.78	5.77		25.03	296.2	0.227	
147	11.72	33.51	5.09		100	14.54	33.68	5.62		25.07	292.7	0.301	
195	9.70	33.71	4.40		150	11.52	33.51	5.03		25.54	248.5	0.436	
291	7.87	33.98	3.12		200	9.58	33.73	4.35		26.05	200.7	0.549	
386	6.59	34.09	1.88		250	8.58	33.89	3.65		26.34	174.3	0.642	
577	5.26	34.22	0.64		300	7.74	33.99	2.97		26.54	155.3	0.724	
870	4.27	34.42	0.48		400	6.47	34.10	1.71		26.80	131.1	0.867	
1220	3.37	34.47	0.95		500	5.68	34.18	0.89		26.97	116.1	0.991	
					600	5.17	34.23	0.61		27.07	107.2	1.103	
					700	4.79	34.31	0.50		27.18	97.6	1.205	
					800	4.47	34.38	0.47		27.27	89.7	1.299	
					1000	3.90	34.45	0.57		27.38	79.7	1.468	
N. B. SCOFIELD; April 8, 1949; 0726 GCT; 31°20'N; 116°55'W; sounding, 475 fm; wind, 315°, force 4; weather, cloudy; sea, rough; wire angle, 30°.													1001
0	14.60	-	5.32	0.41	0	14.60	(33.68)	5.32	0.41	(25.07)	(290.4)	0.000	
9	14.59	33.68	5.36	0.45	10	14.59	33.68	5.38	0.45	25.06	291.3	(0.029)	
22	14.58	33.68	5.43	0.33	20	14.58	33.68	5.42	0.33	25.06	291.4	0.058	
43	14.42	33.69	5.76	0.34	30	14.56	33.69	5.70	0.31	25.08	290.5	0.087	
63	13.10	33.58	5.25	0.45	50	14.08	33.67	5.72	0.37	25.16	282.8	0.145	
84	12.40	33.57	5.01	0.69	75	12.66	33.57	5.10	0.56	25.37	263.4	0.213	
126	10.40	33.62	3.61	1.45	100	11.62	33.58	4.41	1.01	25.58	244.1	0.276	
170p	9.13	33.95	2.67	1.86	150	9.51	33.80	3.06	1.73	26.12	193.6	0.386	
254p	8.78	34.27	1.49	2.28	200	8.99	34.12	2.16	2.04	26.45	162.5	0.475	
440p	6.90	34.31	-	2.78	250	8.79	34.27	1.52	2.28	26.60	149.4	0.553	
612p	5.60	34.38	0.35	3.02	300	8.35	34.30	1.17	2.44	26.69	141.4	0.625	
					400	7.26	34.31	0.72	2.69	26.86	126.3	0.759	
					500	6.40	34.33	0.43	2.89	26.99	114.7	0.880	
					600	5.68	34.37	0.35	3.01	27.12	103.6	0.989	

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
1002	N. B. SCOFIELD; April 8, 1949; 1400, 1432 GCT; 30°54'N, 117°35'W; sounding, 1,000 fm; wind, 315°, force 5; weather, partly cloudy; sea, rough; wire angle, 18°, 18°.											
0	14.99	33.77	5.73	0.46	0	14.99	33.77	5.73	0.46	25.05	292.5	0.000
9	14.97	33.69	6.06	0.41	10	14.97	33.69	6.06	0.41	24.99	298.4	0.030
24	14.99	33.69	5.71	0.39	20	14.97	33.69	5.90	0.40	24.99	298.4	0.059
46	14.66	33.69	5.71	0.35	30	14.97	33.69	5.70	0.38	24.99	298.9	0.089
					50	14.64	33.69	5.71	0.35	25.06	292.6	0.148
69	14.64	33.69	5.76	0.37	75	14.56	33.66	5.72	0.40	25.05	293.8	0.221
91	13.40	33.55	5.54	0.52	100	12.48	33.56	5.37	0.76	25.40	261.2	0.291
135	10.83	33.68	3.62	1.57	150	10.54	33.80	2.85	1.82	25.94	210.5	0.409
179	9.99	34.04	2.34	2.12	200	9.52	34.09	2.20	2.19	26.34	173.1	0.505
268	8.28	34.16	1.79	2.40	250	8.57	34.15	1.90	2.34	26.54	154.9	0.586
360	7.25	34.16	1.06	2.80	300	7.85	34.16	1.50	2.58	26.66	144.3	0.662
545	5.93	34.29	0.41	3.19	400	6.93	34.18	0.86	2.91	26.80	131.4	0.800
832	4.57	34.42	0.46	3.32	500	6.21	34.26	0.49	3.12	26.96	117.2	0.924
1182	3.59	34.51	0.82	3.28	600	5.62	34.32	0.39	3.24	27.08	106.4	1.036
					700	5.11	34.37	0.39	3.30	27.19	97.2	1.138
					800	4.69	34.41	0.45	3.32	27.27	90.1	1.231
					1000	4.05	34.47	0.63	3.32	27.38	79.9	1.401
1003	N. B. SCOFIELD; April 8, 1949; 2134, 2155 GCT; 30°35'N, 118°17'W; sounding, 1,550 fm; wind, 315°, force 6; weather, cloudy; sea, high; wire angle, 15°, missing.											
0	14.78	33.55	4.81	0.43	0	14.78	33.55	4.81	0.43	24.92	304.3	0.000
10	14.75	33.57	5.25	0.40	10	14.75	33.57	5.25	0.40	24.94	302.6	0.030
24	14.64	33.58	5.20	0.45	20	14.67	33.58	5.21	0.44	24.97	300.3	0.060
48	13.82	33.58	5.41	0.44	30	14.50	33.58	5.24	0.45	25.00	297.3	0.090
					50	13.81	33.58	5.40	0.44	25.15	284.1	0.148
72	13.80	33.57	5.32	0.43	75	13.77	33.56	5.32	0.44	25.14	285.3	0.220
96	11.87	33.42	5.20	0.82	100	11.64	33.42	5.17	0.90	25.45	256.3	0.287
144	9.69	33.64	4.02	1.45	150	9.50	33.70	3.90	1.53	26.04	200.8	0.402
192	8.56	33.96	3.17	1.89	200	8.43	33.98	3.05	1.95	26.43	164.3	0.493
287	7.50	34.09	1.99	2.43	250	7.87	34.06	2.37	2.25	26.58	151.2	0.571
382	6.57	34.09	1.20	2.83	300	7.36	34.09	1.90	2.50	26.67	142.3	0.645
569	5.38	34.27	0.49	3.19	400	6.44	34.10	1.06	2.88	26.81	130.7	0.782
846	4.35	34.40	0.51	3.32	500	5.79	34.19	0.61	3.09	26.96	116.9	0.906
1206	3.38	34.54	0.91	3.30	600	5.25	34.30	0.46	3.22	27.11	103.2	1.016
					700	4.85	34.35	0.44	3.28	27.20	95.4	1.115
					800	4.50	34.38	0.49	3.32	27.26	89.9	1.208
					1000	3.90	34.46	0.69	3.32	27.39	78.9	1.376
1004	N. B. SCOFIELD; April 9, 1949; 0325 GCT; 30°18'N, 118°51'W; sounding, 1,950 fm; wind, 315°, force 5; weather, partly cloudy; sea, high; wire angle, 25°.											
0	14.44	33.69	5.15		0	14.44	33.69	5.15		25.10	287.2	0.000
9	14.43	33.55	5.85		10	14.43	33.55	5.84		24.99	298.1	0.029
23	14.42	33.51	5.75		20	14.41	33.52	5.80		24.98	299.4	0.059
45	13.99	33.60	5.78		30	14.35	33.52	5.76		24.99	298.5	0.089
67	12.47	33.51	5.40		50	13.83	33.59	5.77		25.15	283.7	0.147
88	11.32	33.49	4.89		75	12.15	33.50	5.30		25.42	259.1	0.215
130	9.64	33.73	3.12		100	10.51	33.52	4.01		25.73	229.7	0.276
173	9.04	34.02	2.47		150	9.37	33.90	2.76		26.22	183.9	0.380
256	7.73	34.08	2.28		200	8.60	34.05	2.39		26.46	161.8	0.466
340	6.97	34.18	1.09		250	7.82	34.08	2.31		26.60	149.0	0.544
512	5.92	34.28	0.44		300	7.25	34.13	1.55		26.72	137.9	0.615
777	4.57	34.45	0.46		400	6.58	34.22	0.75		26.88	123.7	0.746
1100	3.64	34.51	0.87		500	6.00	34.27	0.46		27.00	113.7	0.865
					600	5.39	34.34	0.37		27.13	102.0	0.973
					700	4.89	34.41	0.39		27.24	91.4	1.069
					800	4.49	34.46	0.48		27.33	83.8	1.157
					1000	3.88	34.50	0.72		27.42	75.7	1.317

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	1005
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	
N. B. SCOFIELD; April 9, 1949; 0955 GCT; 29°50'N, 119°33'W; sounding, 1,900 fm; wind, 290°, force 6; weather, cloudy; sea, high; wire angle, 37°.													
0	14.38	33.55	5.20		0	14.38	33.55	5.20		25.01	296.2	0.000	
8	14.43	33.53	5.48		10	14.43	33.53	5.49		24.98	299.0	0.030	
19	14.42	33.57	5.52		20	14.42	33.57	5.51		25.01	296.1	0.060	
38	14.12	33.53	5.43		30	14.25	33.54	5.47		25.03	295.1	0.089	
55	14.10	33.54	5.43		50	14.10	33.54	5.42		25.06	292.7	0.148	
80	13.89	33.53	5.37		75	14.00	33.53	5.40		25.07	292.1	0.221	
114	12.08	33.37	5.85		100	12.75	33.44	5.81		25.25	275.2	0.292	
146	11.00	33.45	4.64		150	10.90	33.48	4.48		25.63	240.1	0.421	
214	8.72	33.96	2.76		200	9.13	33.92	3.02		26.27	179.4	0.526	
380	6.70	34.14	1.35		250	8.07	34.01	2.25		26.51	157.7	0.610	
869	4.34	34.47	0.56		300	7.45	34.06	1.78		26.64	145.9	0.686	
					400	6.64	34.15	1.31		26.82	129.9	0.823	
					500	6.00	34.24	1.03		26.97	116.0	0.946	
					600	5.48	34.32	0.82		27.10	104.6	1.057	
					700	5.02	34.38	0.70		27.20	95.4	1.156	
					800	4.62	34.44	0.61		27.30	87.1	1.249	
					1000	(3.94)	(34.50)	-		(27.42)	(76.5)	(1.412)	
N. B. SCOFIELD; April 9, 1949; 1658 GCT; 29°24'N, 120°17'W; sounding, 2,100 fm; wind, 315°, force 5; weather, cloudy; sea, rough; wire angle, 15°.													1006
0	14.66	33.58	5.83	0.50	0	14.66	33.58	5.83	0.50	24.97	299.7	0.000	
10	14.63	33.52	5.76	0.41	10	14.63	33.52	5.76	0.41	24.94	303.0	0.030	
24	14.71	33.55	5.75	0.41	20	14.67	33.55	5.76	0.41	24.96	301.5	0.060	
49	13.81	33.53	5.93	0.40	30	14.69	33.55	5.79	0.41	24.94	303.3	0.091	
74	13.60	33.49	5.82	0.41	50	13.80	33.53	5.93	0.40	25.11	287.7	0.150	
98	12.93	33.46	5.69	0.59	75	13.59	33.49	5.82	0.41	25.13	286.9	0.222	
145	11.11	33.41	4.97	1.04	100	12.90	33.46	5.68	0.60	25.24	276.5	0.292	
189	9.62	33.68	4.17	1.53	150	10.83	33.41	4.89	1.15	25.59	244.0	0.422	
276	7.94	34.02	2.92	2.03	200	9.39	33.75	4.00	1.61	26.10	196.2	0.532	
361	6.80	34.13	1.53	2.63	250	8.43	33.95	3.28	1.90	26.41	167.6	0.623	
542	5.86	34.31	0.50	3.22	300	7.54	34.05	2.53	2.22	26.62	147.9	0.702	
837	4.55	34.47	0.54	3.33	400	6.57	34.17	1.00	2.88	26.85	127.1	0.839	
1191	3.51	34.53	1.03	3.27	500	6.05	34.27	0.56	3.18	26.99	114.3	0.960	
					600	5.55	34.36	0.48	3.29	27.12	102.6	1.068	
					700	5.08	34.41	0.49	3.32	27.22	93.8	1.166	
					800	4.69	34.46	0.54	3.33	27.31	86.3	1.257	
					1000	4.04	34.51	0.72	3.32	27.42	76.9	1.420	
N. B. SCOFIELD; April 9, 1949; 2207 GCT; 29°06'N, 120°50'W; sounding, 2,220 fm; wind, 315°, force 2; weather, cloudy; sea, very rough; wire angle, 20°													1007
0	14.80	33.58	4.79	0.52	0	14.80	33.58	4.79	0.52	24.94	302.5	0.000	
9	14.67	33.55	4.63	0.47	10	14.65	33.55	4.63	0.46	24.95	301.8	0.030	
24	14.41	33.51	4.98	0.48	20	14.46	33.52	4.99	0.48	24.97	300.4	0.060	
47	14.29	33.50	4.87	0.46	30	14.38	33.50	4.97	0.48	24.97	300.8	0.090	
70	13.75	33.46	4.88	0.47	50	14.26	33.50	4.87	0.46	25.00	298.7	0.150	
94	13.56	33.39	5.07	0.53	75	13.71	33.45	4.91	0.48	25.07	292.2	0.224	
140	12.56	33.40	4.97	0.73	100	13.50	33.39	5.10	0.55	25.07	293.1	0.297	
184	9.90	33.48	3.65	1.42	150	11.45	33.41	4.80	1.00	25.48	254.8	0.435	
270	8.59	34.05	2.35	2.05	200	9.60	33.56	3.28	1.56	25.91	213.7	0.552	
350	7.62	34.11	1.50	2.56	250	8.85	33.98	2.56	1.92	26.37	171.8	0.648	
499	6.52	34.27	0.52	3.03	300	8.18	34.08	1.99	2.22	26.55	155.1	0.729	
752	4.88	34.33	0.39	3.20	400	7.21	34.18	1.01	2.82	26.77	135.2	0.875	
1098	3.80	34.54	0.72	3.35	500	6.51	34.28	0.51	3.03	26.94	119.6	1.002	
					600	5.78	34.30	0.44	3.10	27.05	109.9	1.117	
					700	5.15	34.32	0.42	3.17	27.14	101.4	1.223	
					800	4.69	34.35	0.39	3.23	27.22	94.5	1.320	
					1000	4.05	34.48	0.57	3.32	27.39	79.2	1.494	

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

1008 N. B. SCOFIELD; April 10, 1949; 0331 GCT; 28°49'N, 121°22'W; sounding, 2,000 fm; wind, 315°, force 2; weather, overcast; sea, rough; wire angle, 11°.

0	15.06	33.64	5.73	0.50	0	15.06	33.64	5.73	0.50	24.93	303.5	0.000
10	15.05	33.58	5.88	0.45	10	15.05	33.58	5.88	0.45	24.89	308.0	0.031
25	14.92	33.44	5.64	0.43	20	14.98	33.45	5.80	0.44	24.80	316.1	0.062
49	14.30	33.58	6.00	0.42	30	14.80	33.45	5.62	0.43	24.84	312.9	0.093
74	14.20	33.53	5.79	0.44	50	14.29	33.58	6.00	0.42	25.05	293.6	0.154
98	13.79	33.46	5.85	0.51	75	14.19	33.52	5.79	0.44	25.02	296.6	0.228
250	9.82	34.05	2.62	2.12	100	13.78	33.45	5.85	0.51	25.06	294.2	0.302
317	7.91	34.02	2.16	2.43	150	12.65	33.50	5.40	0.90	25.32	270.1	0.443
511	5.84	34.27	0.60	3.15	200	11.35	33.78	3.55	1.51	25.78	226.8	0.567
810	4.46	34.40	0.50	3.28	250	9.82	34.05	2.62	2.12	26.26	182.2	0.669
1136	3.46	34.51	0.98	3.14	300	8.31	34.03	2.35	2.39	26.49	160.7	0.755
					400	6.78	34.11	0.90	2.76	26.77	134.6	0.902
					500	5.90	34.26	0.61	3.13	27.00	113.1	1.025
					600	5.35	34.31	0.57	3.23	27.11	103.7	1.135
					700	4.89	34.36	0.53	3.27	27.20	95.1	1.234
					800	4.49	34.40	0.51	3.28	27.28	88.3	1.326
					1000	3.85	34.47	0.70	3.21	27.40	77.6	1.491

1009 N. B. SCOFIELD; April 10, 1949; 0907 GCT; 28°31'N, 121°51'W; sounding, 2,250 fm; wind, 315°, force 2; weather, overcast; sea, rough; wire angle, 5°.

0	15.43	33.66	5.34	0.51	0	15.43	33.66	5.34	0.51	24.87	309.7	0.000
10	15.45	33.71	5.38	0.46	10	15.45	33.71	5.38	0.46	24.90	306.7	0.031
25	15.48	33.55	5.32	0.41	20	15.48	33.57	5.33	0.42	24.79	317.7	0.062
49	15.17	33.60	5.17	0.42	30	15.43	33.56	5.26	0.41	24.79	317.9	0.094
73	15.12	33.53	5.28	0.44	50	15.17	33.60	5.17	0.42	24.88	310.1	0.157
97	14.88	33.68	5.37	0.41	75	15.12	33.53	5.29	0.44	24.83	315.1	0.235
144	13.22	33.46	5.29	0.62	100	14.85	33.68	5.35	0.41	25.01	298.9	0.312
194	10.23	33.58	4.14	0.91	150	12.84	33.46	5.18	0.65	25.25	276.5	0.455
294	8.08	33.89	2.69	2.06	200	10.23	33.61	4.04	0.94	25.85	220.2	0.580
394	6.66	33.98	1.85	2.51	250	8.99	33.77	3.17	1.64	26.18	189.5	0.682
595	5.30	34.09	0.50	2.96	300	7.97	33.90	2.62	2.09	26.44	165.4	0.771
896	4.13	34.54r	0.55	3.12	400	6.59	33.98	1.76	2.53	26.69	141.6	0.924
1242	3.33	34.70r	0.94	3.10	500	5.83	34.03	0.87	2.82	26.83	129.2	1.060
					600	5.27	(34.09)	0.51	2.97	(26.94)	(119.0)	(1.184)
					700	4.81	-	0.52	3.05	-	-	-
					800	4.44	-	0.53	3.10	-	-	-
					1000	3.83	-	0.63	3.13	-	-	-

1010 N. B. SCOFIELD; April 10, 1949; 1438 GCT; 28°11'N, 122°25'W; sounding, 2,280 fm; wind, 337°, force 2; weather, overcast; sea, moderate; wire angle, 14°.

0	15.77	34.02r	5.69	0.46	0	15.77	(33.71)	5.69	0.46	(24.83)	(313.4)	0.000
10	15.74	34.02r	5.70	0.41	10	15.74	(33.71)	5.70	0.41	(24.83)	(313.1)	(0.031)
23	15.74	34.02r	5.64	0.38	20	15.74	(33.71)	5.65	0.39	(24.83)	(313.4)	(0.063)
44	15.18	33.89r	5.78	0.41	30	15.71	(33.71)	5.70	0.38	(24.84)	(312.9)	(0.094)
63	15.13	33.86r	5.68	0.44	50	15.17	(33.71)	5.77	0.42	(24.96)	(302.0)	(0.155)
92	15.04	33.71	5.75	0.47	75	15.09	(33.71)	5.70	0.45	(24.98)	(301.0)	(0.231)
168	11.34	33.55	4.88	1.12	100	15.00	33.70	5.75	0.52	24.99	300.6	(0.306)
252	8.57	33.91	3.48	1.89	150	12.40	33.57	5.17	0.96	25.42	260.5	0.446
433	6.38	34.14	1.03	2.98	200	10.07	33.68	4.42	1.38	25.93	212.4	0.565
706	5.08	34.34	0.43	3.27	250	8.58	33.90	3.51	1.84	26.35	173.5	0.661
985	4.05	34.40	0.68	3.35	300	7.60	34.01	2.47	2.53	26.58	151.8	0.742
					400	6.59	34.11	1.15	2.91	26.80	132.1	0.884
					500	6.02	34.20	0.84	3.08	26.94	119.0	1.010
					600	5.53	34.28	0.59	3.19	27.06	108.2	1.123
					700	5.11	34.34	0.45	3.26	27.16	99.4	1.227
					800	4.71	34.37	0.46	3.31	27.23	93.4	1.324
					1000	(4.00)	(34.41)	(0.70)	(3.35)	(27.34)	(83.8)	(1.501)

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

N.B. SCOFIELD; April 10, 1949; 1952 GCT; 27°52'N, 123°00'W; sounding 2,230 fm; wind, 045°; force 2; weather, overcast; sea, rough; wire angle, 00°. 1011

0	16.13	33.80	5.25	0.74	0	16.13	33.80	5.25	0.74	24.82	314.4	0.000
10	16.02	33.69	5.18	0.45	10	16.02	33.69	5.18	0.45	24.76	320.6	0.032
25	15.52	33.71	5.37	0.42	20	15.61	33.70	5.32	0.42	24.86	311.2	0.063
50	15.74	33.86	5.30	0.44	30	15.54	33.73	5.38	0.42	24.90	307.8	0.094
74	15.66	33.96	5.20	0.47	50	15.74	33.86	5.30	0.44	24.95	303.2	0.155
99	15.49	33.86	5.38	0.45	75	15.66	33.96	5.20	0.47	25.04	294.8	0.230
147	12.33	33.60	4.68	0.75	100	15.47	33.85	5.39	0.45	25.00	299.3	0.304
194	10.06	33.71	3.61	1.55	150	11.93	33.60	4.62	0.81	25.54	249.2	0.442
283	9.10	34.31	1.49	2.45	200	9.98	33.75	3.47	1.61	26.00	205.7	0.556
363	7.83	34.27	0.98	2.62	250	9.45	34.20	2.21	2.26	26.44	164.9	0.648
536	6.01	34.36	0.47	3.05	300	8.87	34.31	1.40	2.48	26.62	148.7	0.726
831	4.60	34.47	0.45	3.14	400	7.30	34.28	0.80	2.71	26.83	129.2	0.865
1185	3.62	34.54	0.88	3.15	500	6.27	34.34	0.52	3.01	27.02	112.0	0.986
					600	5.63	34.39	0.42	3.09	27.14	101.3	1.092
					700	5.14	34.43	0.41	3.12	27.23	93.1	1.189
					800	4.70	34.46	0.44	3.13	27.30	86.6	1.279
					1000	4.06	34.51	0.59	3.15	27.41	77.1	1.444

N.B. SCOFIELD; April 7, 1949; 1636 GCT; 29°30'N, 116°07'W; sounding, 1,250 fm; wind, 315°, force 2; weather, cloudy; sea, moderate; wire angle, missing. 1101

0	13.90	33.48	5.90		0	13.90	33.48	5.90		25.05	291.8	0.000
10	13.85	33.44	6.10		10	13.85	33.44	6.10		25.03	294.0	0.029
25	13.34	33.55	5.98		20	13.56	33.54	6.08		25.17	281.1	0.058
50	10.96	33.58	3.86		30	13.08	33.57	5.02		25.29	271.0	0.086
75	9.90	33.49	3.18		50	10.96	33.58	3.86		25.70	231.6	0.136
100	9.83	33.91	2.60		75	9.90	33.49	3.18		25.81	221.1	0.192
150	9.12	34.04	1.99		100	9.83	33.91	2.60		26.15	189.5	0.244
200	8.46	34.02	1.88		150	9.12	34.04	1.99		26.37	169.5	0.333
300	7.76	34.29r	0.91		200	8.46	34.02	1.88		26.46	161.7	0.417
400	7.00	34.05	0.50		250	8.09	34.01	1.46		26.50	158.1	0.496
600	5.77	34.20	0.34		300	7.76	34.02	0.91		26.56	153.3	0.574
900	4.38	34.42	0.47		400	7.00	34.05	0.50		26.69	142.0	0.722
1250	3.44	34.51	0.91		500	6.32	34.10	0.35		26.82	130.3	0.858
					600	5.77	34.20	0.34		26.97	117.2	0.982
					700	5.26	34.30	0.35		27.11	104.2	1.093
					800	4.81	34.37	0.40		27.22	94.7	1.192
					1000	4.06	34.45	0.59		27.37	81.4	1.368

N. B. SCOFIELD; April 7, 1949; 1018 GCT; 29°09'N, 116°48'W; sounding, 1,950 fm; wind, 315°, force 3; weather, overcast; sea, moderate; wire angle, 25°. 1102

0	14.80	33.58	5.33		0	14.80	33.58	5.33		24.94	302.7	0.000
9	14.77	33.62	5.80		10	14.79	33.62	5.80		24.97	299.8	0.030
23	14.86	33.62	5.36		20	14.84	33.62	5.45		24.96	301.1	0.060
45	14.87	33.71	5.39		30	14.88	33.63	5.35		24.96	301.4	0.090
67	14.80	33.71	5.28		50	14.87	33.71	5.38		25.03	296.0	0.150
89	14.09	33.69	5.38		75	14.67	33.71	5.30		25.07	292.4	0.224
132	11.94	33.49	4.18		100	13.61	33.66	5.30		25.25	275.4	0.295
176	9.52	34.35	1.14		150	10.15	33.70	1.45		25.93	211.3	0.417
261	9.37	34.34	1.16		200	9.45	34.36	1.14		26.56	152.2	0.507
346	8.21	-	-		250	9.39	34.34	1.16		26.56	153.7	0.583
521	6.39	34.22	0.49		300	8.94	34.31	1.09		26.61	149.8	0.660
804	5.02	34.42	0.39		400	7.56	34.25	0.79		26.77	135.2	0.802
1165	3.91	34.38	0.68		500	6.54	34.22	0.52		26.89	124.4	0.932
					600	5.92	34.28	0.37		27.02	113.2	1.051
					700	5.44	34.37	0.35		27.15	101.5	1.157
					800	5.04	34.42	0.40		27.23	93.8	1.256
					1000	4.35	34.42	0.55		27.31	87.2	1.437

SIO

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4904

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

1103 N. B. SCOFIELD; April 7, 1949; 0410 GCT; 28°48'N, 117°20'W; sounding, 1,860 fm; wind, 315°, force 2; weather, cloudy; sea, moderate; wire angle, 11°.

0	15.38	33.77	5.64	0	15.38	33.77	5.64	24.96	300.8	0.000
10	15.29	33.71	5.61	10	15.29	33.71	5.61	24.94	303.5	0.030
24	15.33	33.66	5.71	20	15.33	33.67	5.69	24.90	307.5	0.061
49	14.62	33.62	5.69	30	15.26	33.65	5.71	24.90	307.7	0.091
73	14.62	33.58	5.59	50	14.62	33.62	5.70	25.01	297.3	0.152
98	13.61	33.49	5.68	75	14.58	33.57	5.61	24.98	300.9	0.227
147	11.38	33.56	4.05	100	13.40	33.49	5.66	25.16	283.9	0.300
196	10.81	34.04	2.08	150	11.34	33.58	3.90	25.63	240.3	0.431
293	9.22	34.27	1.17	200	10.73	34.07	2.02	26.12	194.8	0.540
391	7.84	34.29	0.72	250	9.90	34.23	1.51	26.39	170.1	0.631
586	6.12	34.47	0.32	300	9.09	34.27	1.15	26.56	154.8	0.713
882	4.51	34.42	0.45	400	7.73	34.29	0.68	26.78	134.6	0.857
1234	3.54	34.52	0.82	500	6.78	34.37	0.43	26.97	116.7	0.982
				600	6.03	34.47	0.32	27.15	100.6	1.091
				700	5.42	34.47	0.34	27.23	93.8	1.188
				800	4.90	34.43	0.41	27.26	91.4	1.280
				1000	4.09	34.44	0.56	27.35	82.5	1.454

1104 N.B. SCOFIELD; April 6, 1949; 2207 GCT; 28°26'N, 117°58'W;sounding, 2,160 fm; wind, 315°, force 3; weather, overcast; sea, moderate; wire angle 28°.

0	15.33	33.71	5.14	0	15.33	33.71	5.14	24.93	304.0	0.000
9	15.29	33.66	5.16	10	15.28	33.66	5.16	24.90	307.0	0.031
22	15.15	33.67	5.29	20	15.17	33.67	5.30	24.93	304.2	0.061
43	14.75	33.66	5.39	30	14.99	33.67	5.35	24.97	300.7	0.091
65	14.35	33.64	5.43	50	14.63	33.66	5.40	25.04	294.5	0.151
86	13.83	33.58	5.54	75	14.13	33.61	5.52	25.11	288.7	0.224
126	11.75	33.57	3.79	100	13.35	33.57	5.49	25.24	277.0	0.294
166	10.45	33.94	2.71	150	10.90	33.82	3.01	25.90	215.1	0.418
243	8.94	34.20	1.78	200	9.66	34.07	2.30	26.30	176.8	0.516
317	8.28	34.36	0.95	250	8.86	34.22	1.69	26.55	154.1	0.598
468	7.01	34.40	0.35	300	8.43	34.34	1.15	26.71	139.7	0.672
700	5.38	34.42	0.28	400	7.59	34.39	0.52	26.88	125.1	0.804
1000	4.10	34.51	0.58	500	6.74	34.40	0.32	27.00	113.9	0.924
				600	5.99	34.41	0.27	27.11	104.5	1.033
				700	5.38	34.42	0.28	27.19	97.0	1.134
				800	4.90	34.44	0.34	27.27	90.6	1.228
				1000	4.10	34.51	0.58	27.41	77.6	1.396

1105 N.B. SCOFIELD; April 6, 1949; 1540 GCT; 28°08'N, 118°43'W; sounding 2,090 fm; wind, 315°, force 3; weather, drizzle; sea, moderate; wire angle, 22°.

0	16.04	33.87	5.68	0	16.04	33.87	5.68	24.89	307.6	0.000
9	16.03	33.84	5.61	10	16.03	33.84	5.60	24.87	309.9	0.031
23	16.03	33.84	5.58	20	16.04	33.84	5.60	24.87	310.3	0.062
40p	16.00r	33.82	5.68	30	16.03	33.83	5.63	24.86	311.0	0.093
44	15.87	33.82	5.70	50	15.78	33.81	5.68	24.90	307.7	0.155
60p	15.65r	33.80	5.64	75	14.95	33.67	5.65	24.98	301.0	0.231
65	15.45	33.77	5.70	100	13.50	33.62	5.00	25.24	276.2	0.303
84	14.47	33.64	5.54	150	10.50	33.67	3.77	25.85	219.3	0.427
137p	10.96	33.64	4.01	200	9.42	34.06	2.97	26.33	173.9	0.525
221p	9.09	34.09	2.64	250	8.70	34.12	2.25	26.50	160.1	0.608
383	7.22	34.25	0.89	300	8.10	34.17	1.64	26.63	147.4	0.686
583	5.71	34.45	0.30	400	7.03	34.27	0.79	26.86	126.1	0.822
873	4.46	34.51	0.47	500	6.20	34.38	0.40	27.06	108.1	0.940
				600	5.61	34.46	0.30	27.20	95.9	1.042
				700	5.11	34.49	0.31	27.28	88.3	1.134
				800	4.71	34.50	0.40	27.34	83.8	1.220
				1000	(4.02)	(34.51)	-	(27.42)	(76.6)	(1.380)

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	1106
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	
N. B. SCOFIELD; April 6, 1949; 0933 GCT; 27°43'N, 119°14'W; sounding, 1,900 fm; wind, 340°, force 3; weather, overcast; sea, rough; wire angle, 15°.													
0	15.70	33.86	5.38		0	15.70	33.86	5.38		24.96	300.7	0.000	
10	15.67	33.78	5.23		10	15.67	33.78	5.23		24.90	306.2	0.030	
24	15.46	33.78	5.51		20	15.50	33.78	5.49		24.95	302.8	0.061	
48	15.29	33.77	5.42		30	15.41	33.78	5.50		24.96	301.5	0.091	
72	14.66	33.71	5.40		50	15.28	33.77	5.41		24.98	300.0	0.151	
96	11.99	33.51	4.81		75	14.05	33.70	5.38		25.19	280.5	0.224	
192	9.71	34.31	1.41		100	11.77	33.51	4.38		25.50	251.9	0.290	
288	8.43	34.34	0.78		150	10.42	33.91	2.15		26.05	200.2	0.404	
384	7.70	34.34	0.50		200	9.56	34.32	1.36		26.52	156.7	0.492	
576	5.91	34.42	0.31		250	8.85	34.34	0.98		26.65	145.1	0.567	
877	4.39	34.45	0.50		300	8.34	34.34	0.75		26.72	138.3	0.639	
1221	3.43	34.49	0.89		400	7.57	34.34	0.48		26.84	128.5	0.772	
					500	6.57	34.38	0.34		27.01	112.9	0.893	
					600	5.77	34.43	0.32		27.15	100.2	1.000	
					700	5.19	34.45	0.37		27.24	92.6	1.096	
					800	4.70	34.45	0.45		27.30	87.3	1.186	
					1000	3.98	34.45	0.65		27.37	80.5	1.353	
N. B. SCOFIELD; April 6, 1949; 0338 GCT; 27°21'N, 119°52'W; sounding, 2,140 fm; wind, 022°, force 1; weather, drizzle; sea, moderate; wire angle, 15°.													1107
0	15.39	33.75	5.68		0	15.39	33.75	5.68		24.94	302.4	0.000	
10	15.28	33.73	5.64		10	15.28	33.73	5.64		24.95	301.9	0.030	
24	14.98	33.75	5.71		20	15.01	33.75	5.70		25.03	295.0	0.060	
48	14.91	33.75	5.69		30	14.96	33.75	5.71		25.04	294.2	0.090	
71	14.88	33.78	5.68		50	14.90	33.75	5.70		25.05	293.5	0.148	
95	13.63	33.58	5.69		75	14.88	33.78	5.69		25.08	291.6	0.221	
141	10.55	33.57	4.73		100	13.14	33.58	5.67		25.29	272.2	0.292	
187	9.15	33.96	3.57		150	10.25	33.59	4.49		25.83	221.1	0.416	
277	8.25	34.33	1.40		200	8.96	34.07	3.00		26.42	165.8	0.512	
366	7.61	34.40	0.84		250	8.46	34.28	1.69		26.66	143.4	0.589	
547	5.95	34.43	0.32		300	8.08	34.36	1.20		26.78	133.1	0.659	
845	4.56	34.49	0.50		400	7.27	34.40	0.68		26.93	119.8	0.785	
1198	3.50	34.51	0.88		500	6.28	34.42	0.38		27.08	106.1	0.898	
					600	5.62	34.44	0.33		27.18	97.6	1.000	
					700	5.12	34.46	0.36		27.26	90.6	1.094	
					800	4.71	34.49	0.46		27.33	84.5	1.181	
					1000	4.06	34.50	0.66		27.41	77.8	1.343	
N. B. SCOFIELD; April 5, 1949; 2145 GCT; 26°59'N, 120°29'W; sounding, 2,180 fm; wind, 315°, force 2; weather, overcast; sea, rough; wire angle, 13°.													1108
0	16.03	33.87	5.29		0	16.03	33.87	5.29		24.89	307.2	0.000	
10	15.77	33.84	5.34		10	15.77	33.84	5.34		24.93	304.1	0.031	
24	15.62	33.80	5.30		20	15.66	33.81	5.31		24.93	304.0	0.061	
48	15.47	33.78	5.31		30	15.56	33.79	5.30		24.94	303.6	0.091	
72	15.42	33.78	5.32		50	15.47	33.78	5.30		24.95	303.2	0.152	
96	14.62	33.66	5.44		75	15.37	33.78	5.34		24.97	301.7	0.228	
142	13.84	33.55	5.42		100	14.53	33.65	5.44		25.05	294.5	0.302	
188	10.38	33.68	4.11		150	13.50	33.55	5.35		25.19	282.7	0.447	
280	8.71	34.31	1.84		200	10.04	33.77	3.76		26.01	205.3	0.569	
371	8.07	34.38	0.55		250	9.03	34.25	2.52		26.55	154.5	0.659	
556	5.82	34.42	0.41		300	8.56	34.34	1.44		26.69	141.7	0.732	
846	4.47	34.49	0.45		400	7.79	34.39	0.51		26.85	128.0	0.867	
1201	3.53	34.58	0.85		500	6.30	34.41	0.43		27.07	107.2	0.985	
					600	5.54	34.43	0.36		27.18	97.3	1.087	
					700	5.07	34.45	0.35		27.25	90.7	1.181	
					800	4.64	34.48	0.42		27.33	84.3	1.268	
					1000	4.00	34.53	0.63		27.43	74.9	1.428	

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

1109 N. B. SCOFIELD; April 5, 1949; 1601 GCT; 26°37'N; 121°07'W; sounding, 2,250 fm; wind, 040°, force 2; weather, overcast; sea, moderate; wire angle, 0°.

0	15.53	33.76	5.42	0	15.53	33.76	5.42	24.92	304.2	0.000
10	15.49	33.77	5.62	10	15.49	33.77	5.62	24.94	301.0	0.030
25	15.37	33.75	5.45	20	15.40	33.76	5.50	24.95	302.4	0.060
50	15.36	33.73	5.53	30	15.37	33.74	5.46	24.94	303.6	0.091
75	15.29	33.73	5.56	50	15.36	33.73	5.53	24.94	304.4	0.152
100	14.54	33.68	5.36	75	15.29	33.73	5.56	24.95	303.7	0.228
150	12.06	33.57	4.73	100	14.54	33.68	5.36	25.07	292.5	0.302
200	9.77	33.75	3.82	150	12.06	33.57	4.73	25.49	253.8	0.439
300	8.44	34.16	1.97	200	9.77	33.75	3.82	26.04	202.3	0.553
400	6.88	34.18	1.21	250	9.04	34.03	2.51	26.37	170.9	0.646
600	5.65	34.36	0.37	300	8.44	34.16	1.97	26.57	153.1	0.727
900	4.39	34.45	0.59	400	6.88	34.18	1.21	26.81	130.8	0.869
1250	3.42	34.52	1.00	500	6.22	34.26	0.65	26.96	117.2	0.993
				600	5.65	34.36	0.37	27.11	103.9	1.103
				700	5.16	34.40	0.41	27.20	95.5	1.203
				800	4.75	34.43	0.49	27.28	89.4	1.295
				1000	4.09	34.47	0.71	27.38	80.3	1.465

1110 N. B. SCOFIELD; April 5, 1949; 1009 GCT; 26°15'N, 121°45'W; sounding, 1,620 fm; wind, 035°, force 2; weather, partly cloudy; sea, rough; wire angle, 5°.

0	15.88	33.82	5.28	0	15.88	33.82	5.28	24.89	307.7	0.000
10	15.90	33.84	5.11	10	15.90	33.84	5.11	24.90	306.9	0.031
25	15.68	33.80	5.39	20	15.76	33.82	5.34	24.92	305.5	0.061
50	15.64	34.40r	5.48	30	15.68	33.80	5.41	24.92	305.6	0.092
75	15.62	33.62r	5.49	50	15.64	33.79	5.48	24.92	306.0	0.153
100	15.52	33.82	5.49	75	15.62	33.81	5.49	24.94	304.8	0.229
150	14.09	33.49	5.52	100	15.52	33.82	5.49	24.97	302.4	0.305
200	10.65	33.71	3.98	150	14.09	33.49	5.52	25.02	298.8	0.455
300	8.40	34.20	1.98	200	10.65	33.71	3.98	25.85	219.8	0.586
400	6.94	34.16	0.95	250	9.24	34.09	2.80	26.38	170.2	0.683
600	5.66	34.40	0.38	300	8.40	34.20	1.98	26.61	149.5	0.763
900	4.46	34.54	0.62	400	6.94	34.16	0.95	26.79	132.2	0.904
1250	3.43	34.60	0.93	500	6.19	34.25	0.51	26.96	117.5	1.028
				600	5.66	34.40	0.38	27.14	101.0	1.138
				700	5.20	34.46	0.46	27.25	91.7	1.234
				800	4.81	34.51	0.53	27.33	84.4	1.327
				1000	4.13	34.57	0.71	27.45	73.5	1.480

1111 N. B. SCOFIELD; April 5, 1949; 0351 GCT; 25°52'N; 122°25'W; sounding, 2,120 fm; wind, 058°, force 1; weather, partly cloudy; sea, rough; wire angle, 5°.

0	16.58	34.42r	5.42	0	16.58	(33.95)	5.42	(24.83)	(313.3)	0.000
10	16.66	33.95	5.41	10	16.66	33.95	5.41	24.81	315.3	(0.032)
25	-	33.98	5.40	20	16.65	33.97	5.40	24.83	313.9	0.063
50	16.52	34.02	5.41	30	16.61	33.99	5.40	24.85	311.8	0.094
74	16.44	33.98	5.38	50	16.52	34.02	5.41	24.90	308.2	0.156
99	16.19	33.91	5.34	75	16.43	33.98	5.38	24.89	310.0	0.234
148	15.42	33.87	5.28	100	16.18	33.91	5.34	24.89	310.1	0.311
197	10.81	33.62	4.10	150	15.35	33.86	5.25	25.04	297.6	0.463
295	8.37	34.02	2.72	200	10.70	33.62	4.05	25.77	227.5	0.595
392	7.46	34.27	1.08	250	9.18	33.77	3.37	26.15	192.3	0.699
587	5.86	34.40	0.35	300	8.30	34.04	2.65	26.50	159.9	0.787
890	4.48	34.47	0.62	400	7.38	34.28	1.00	26.82	130.1	0.932
1238	3.46	34.58	0.88	500	6.51	34.37	0.47	27.01	113.0	1.054
				600	5.79	34.41	0.36	27.13	101.9	1.161
				700	5.27	34.43	0.45	27.22	94.8	1.260
				800	4.84	34.46	0.56	27.29	88.4	1.351
				1000	4.12	34.49	0.71	27.39	79.2	1.519

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	1201
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	
N. B. SCOFIELD; April 2, 1949; 0133 GCT; 27°30'N, 115°18'W; sounding, 1,540 fm; wind, 315°, force 4; weather, cloudy; sea, rough; wire angle, 26°.													
0	14.50	33.71	5.68	0.49	0	14.50	33.71	5.68	0.49	25.10	287.1	0.000	
9	14.40	33.60	5.80	0.37	10	14.39	33.60	5.80	0.37	25.04	293.0	0.029	
22	14.27	33.71	5.71	0.44	20	14.29	33.69	5.75	0.43	25.13	284.8	0.058	
45	14.18	33.73	5.68	0.43	30	14.25	33.72	5.70	0.44	25.17	282.0	0.086	
67	11.74	33.60	3.77	1.36	50	14.10	33.73	5.63	0.44	25.21	278.7	0.142	
88	11.29	33.96	2.09	1.83	75	11.55	33.63	3.21	1.58	25.63	238.9	0.207	
132	10.52	34.34	1.18	2.30	100	11.05	34.00	1.60	1.98	26.01	203.3	0.262	
174	9.72	34.36	1.18	2.28	150	10.17	34.35	1.19	2.30	26.44	163.8	0.354	
258	9.17	34.47	0.59	2.64r	200	9.51	34.39	0.99	2.36	26.58	151.0	0.432	
340	8.37	34.42	0.31	2.94	250	9.24	34.47	0.64	2.60	26.69	141.7	0.506	
506	7.10	34.43	0.25	2.64	300	8.77	34.45	0.43	2.81	26.74	136.8	0.575	
828	4.91	34.51	0.32	3.20	400	7.88	34.41	0.26	3.02	26.85	128.0	0.708	
1179	3.56	34.42	0.84	3.13	500	7.14	34.43	0.24	3.11	26.97	117.3	0.830	
					600	6.37	34.46	0.25	3.16	27.10	106.0	0.942	
					700	5.64	34.48	0.27	3.18	27.21	96.0	1.043	
					800	5.07	34.51	0.31	3.20	27.30	87.6	1.135	
					1000	4.18	34.48	0.55	3.20	27.37	80.8	1.304	
N. B. SCOFIELD; April 2, 1949; 0805 GCT; 27°05'N, 115°55'W; sounding, 1,950 fm; wind, 315°, force 4; weather, partly cloudy; sea, rough; wire angle, 30°.													1202
0	15.2	33.68	5.33	0.53	0	15.2	33.68	5.33	0.53	24.94	303.0	0.000	
9	15.18	33.75	5.38	0.51	10	15.19	33.76	5.38	0.51	25.00	297.6	0.030	
22	15.19	33.82	5.49	0.46	20	15.19	33.82	5.45	0.47	25.04	293.6	0.060	
43	15.13	33.84	5.55	0.46	30	15.17	33.83	5.51	0.46	25.05	292.7	0.089	
65	14.71	33.77	5.52	0.47	50	15.04	33.83	5.56	0.46	25.08	290.5	0.147	
86	14.13	33.73	5.25	0.62	75	14.49	33.74	5.45	0.48	25.13	286.6	0.219	
128	11.26	34.05	2.25	1.92	100	13.50	33.77	3.79	1.50	25.36	265.2	0.288	
170	10.96	34.27	1.48	2.23	150	11.12	34.18	1.84	2.11	26.14	192.3	0.403	
252	9.74	34.52	0.68	2.55	200	10.57	34.39	1.09	2.36	26.40	168.6	0.493	
333	8.94	34.54	0.42	2.74	250	9.77	34.52	0.71	2.54	26.64	146.6	0.571	
493	7.19	34.51	0.32	3.00	300	9.26	34.54	0.52	2.67	26.74	137.7	0.643	
726	5.54	34.50	0.32	3.09	400	8.11	34.52	0.35	2.88	26.90	123.4	0.774	
1009	4.13	34.54	0.54	3.09	500	7.12	34.51	0.31	3.00	27.04	111.1	0.891	
					600	6.34	34.50	0.30	3.06	27.14	102.6	0.998	
					700	5.69	34.50	0.35	3.09	27.22	95.1	1.096	
					800	5.12	34.51	0.40	3.10	27.30	88.2	1.188	
					1000	4.17	34.54	0.53	3.10	27.42	76.2	1.352	
N. B. SCOFIELD; April 2, 1949; 1434 GCT; 26°38'N, 116°27'W; sounding, 2,025 fm; wind, 295°, force 4; weather, overcast; sea, rough; wire angle, 24°.													1203
0	15.4	33.87	5.24	0.38	0	15.4	33.87	5.24	0.38	25.03	294.3	0.000	
9	15.18r	33.86	5.60	0.39	10	15.51	33.86	5.60	0.39	25.00	297.0	0.030	
23	-	33.89	5.41	0.38	20	15.52	33.89	5.40	0.38	25.03	295.2	0.059	
46	15.51	33.84	5.45	0.39	30	15.52	33.88	5.40	0.38	25.02	296.2	0.089	
68	14.90	33.82	5.51	0.42	50	15.46	33.83	5.46	0.40	24.99	299.2	0.148	
91	14.56	33.82	5.25	0.59	75	14.81	33.82	5.50	0.44	25.12	287.3	0.222	
135	11.98	33.89	2.98	1.67	100	14.20	33.83	5.00	0.82	25.26	274.5	0.292	
179	11.04	34.29	1.60	2.18	150	11.51	34.00	2.38	1.86	25.93	212.3	0.414	
267	10.35	34.54	0.71	2.57	200	10.86	34.43	1.27	2.34	26.38	170.5	0.509	
353	9.32	34.54	0.40	2.71	250	10.51	34.53	0.82	2.53	26.52	158.3	0.591	
526	7.16	34.58r	0.21	3.08	300	9.97	34.55	0.56	2.63	26.63	148.7	0.668	
794	5.12	34.49r	0.41	3.09	400	8.69	(34.54)	0.31	2.95	(26.84)	(130.0)	(0.808)	
1128	3.80	34.58r	0.75	3.16	500	7.46	-	0.24	3.06	-	-	-	
					600	6.42	-	0.25	3.09	-	-	-	
					700	5.67	-	0.33	3.09	-	-	-	
					800	5.08	-	0.44	3.09	-	-	-	
					1000	4.17	-	0.62	3.12	-	-	-	

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4904

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

1204 N. B. SCOFIELD; April 2, 1949; 2115 GCT; 26°16'N, 117°03'W; sounding, 2,150 fm; wind, 285°, force 2; weather, overcast; sea, rough; wire angle, 26°.

0	16.35	34.02r	5.28	0.44	0	16.35	-	5.28	0.44	-	-	-
9	16.46	34.09r	5.19	0.45	10	16.46	-	5.19	0.45	-	-	-
22	-	34.00r	5.35	0.48	20	16.43	-	5.35	0.48	-	-	-
44	16.26	34.04r	5.30	0.46	30	16.36	-	5.34	0.48	-	-	-
67	16.18	33.86r	5.30	0.54	50	16.24	-	5.30	0.47	-	-	-
89	14.81	33.96r	5.32	0.61	75	16.08	-	5.33	0.57	-	-	-
133	11.50	33.78r	3.65	1.49	100	13.42	-	5.30	0.66	-	-	-
176	10.44	33.98r	2.12	2.07	150	10.94	-	2.86	1.71	-	-	-
262	9.68	34.43r	0.92	2.59	200	10.18	-	1.70	2.24	-	-	-
348	8.93	34.63r	0.42	2.84	250	9.77	-	1.04	2.52	-	-	-
522	6.99	34.47r	0.27	3.04	300	9.35	-	0.63	2.73	-	-	-
794	5.04	34.60r	0.33	3.19	400	8.33	-	0.31	2.92	-	-	-
1139	3.82	34.36r	0.67	3.16	500	7.22	-	0.26	3.03	-	-	-
					600	6.24	-	0.27	3.11	-	-	-
					700	5.53	-	0.29	3.17	-	-	-
					800	5.00	-	0.34	3.20	-	-	-
					1000	4.25	-	0.55	3.19	-	-	-

1205 N. B. SCOFIELD; April 3, 1949; 0257 GCT; 25°49'N, 117°38'W; sounding, 2,200 fm; wind, 292°, force 4; weather, overcast; sea, very rough; wire angle, 16°.

0	16.3	34.11r	5.23	0.45	0	16.3	(33.80)	5.23	0.45	(24.78)	(318.2)	0.000
10	16.29	33.91r	5.44	0.47	10	16.29	(33.80)	5.44	0.47	(24.78)	(318.2)	(0.032)
24	16.26	33.89r	5.48	0.44	20	16.28	(33.80)	5.47	0.45	(24.78)	(318.4)	(0.064)
48	15.94	33.77r	5.40	0.46	30	16.19	(33.80)	5.45	0.45	(24.80)	(316.6)	(0.095)
72	15.19	33.80	5.71	0.44	50	15.92	(33.80)	5.41	0.46	(24.86)	(311.3)	(0.158)
96	14.44	33.73	5.01	0.74	75	15.63	33.80	5.70	0.44	24.93	305.7	(0.235)
143	10.87	33.87	2.84	1.86	100	13.80	33.73	4.67	0.93	25.27	274.2	0.308
190	9.69	34.14	2.25	2.15	150	10.60	33.91	2.73	1.92	26.02	203.3	0.428
284	8.91	34.38	1.02	2.65	200	9.56	34.19	2.11	2.19	26.42	166.3	0.520
377	8.37	34.38	0.43	3.03	250	9.13	34.35	1.42	2.39	26.61	148.7	0.598
565	6.52	34.52	0.30	3.28	300	8.82	34.38	0.89	2.76	26.68	142.8	0.671
847	4.77	34.52	0.38	3.45	400	8.18	34.39	0.43	3.07	26.79	133.9	0.810
1176	3.60	34.56	0.78	3.46	500	7.14	34.50	0.34	3.21	27.03	112.1	0.933
					600	6.26	34.52	0.28	3.32	27.16	100.0	1.039
					700	5.58	34.52	0.29	3.40	27.25	92.2	1.135
					800	5.00	34.52	0.36	3.44	27.32	85.8	1.224
					1000	4.14	34.53	0.58	3.47	27.42	76.8	1.386

1206 N. B. SCOFIELD; April 3, 1949; 0905 GCT; 25°27'N, 118°12'W; sounding, 2,150 fm; wind 250°, force 4; weather, squally; sea, very rough; wire angle, 28°.

0	15.68	33.93	5.20	0.45	0	15.68	33.93	5.20	0.45	25.02	295.1	0.000
9	15.82	33.96	5.11	0.50	10	15.82	33.96	5.11	0.50	25.01	296.5	0.030
22	15.81	33.91	5.20	0.48	20	15.81	33.92	5.19	0.49	24.98	299.6	0.059
44	15.80	33.89	5.14	0.48	30	15.81	33.91	5.19	0.49	24.97	300.6	0.089
65	15.82	33.86	5.04	0.44	50	15.82	33.88	5.09	0.48	24.95	303.3	0.150
86	15.66	33.93	5.21	0.47	75	15.76	33.91	5.12	0.45	24.99	300.4	0.225
128	13.49	33.68	4.44	0.91	100	15.27	33.83	5.05	0.54	25.03	296.9	0.300
169	10.34	33.86	3.08	1.63	150	11.14	33.77	3.62	1.31	25.81	223.1	0.430
250	8.88	34.19	2.03	2.08	200	9.53	33.99	2.64	1.83	26.26	180.6	0.531
330	8.82	34.45	0.81	2.62	250	8.88	34.19	2.03	2.08	26.52	156.9	0.615
495	7.03	34.51	0.34	3.04	300	8.86	34.38	1.08	2.46	26.68	143.3	0.691
750	5.35	34.42	0.30	3.21	400	8.04	34.50	0.54	2.86	26.90	123.7	0.823
1070	4.05	34.51	0.60	3.19	500	7.00	34.51	0.35	3.05	27.05	109.4	0.941
					600	6.25	34.49	0.25	3.14	27.14	102.1	1.047
					700	5.62	34.43	0.27	3.20	27.17	99.4	1.147
					800	5.09	34.42	0.34	3.22	27.23	94.6	1.244
					1000	4.29	34.48	0.52	3.21	27.36	82.0	1.421

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

N. B. SCOFIELD; April 3, 1949; 1555 GCT; 25°01'N, 118°53'W; sounding, 2,190 fm; wind, 330°, force 6; weather, partly cloudy; sea, rough; wire angle, 27°. 1207

0	16.30	33.96	5.60	0	16.30	33.96	5.60	24.90	306.6	0.000
9	16.46	33.91	5.55	10	16.46	33.91	5.55	24.83	314.7	0.031
22	16.45	33.87	5.59	20	16.45	33.87	5.60	24.80	316.8	0.063
44	16.44	33.84	5.52	30	16.45	33.86	5.58	24.79	317.9	0.094
66	16.44	33.82	5.36	50	16.44	33.83	5.47	24.77	320.5	0.158
87	16.39	33.87	5.54	75	16.42	33.83	5.48	24.77	320.7	0.238
129	15.52	33.73	5.51	100	16.34	33.83	5.55	24.79	319.7	0.318
170	11.39	33.60	3.95	150	13.23	33.66	4.68	25.33	269.3	0.465
252	9.82	34.20	1.88	200	10.53	33.75	3.10	25.91	214.9	0.587
331	9.19	34.43	0.77	250	9.83	34.18	1.91	26.36	172.7	0.684
490	7.15	34.40	0.38	300	9.42	34.38	1.02	26.58	152.3	0.765
736	5.47	34.40	0.36	400	8.26	34.42	0.55	26.80	133.0	0.908
1045	4.03	34.49	0.61	500	7.07	34.40	0.38	26.96	118.5	1.033
				600	6.32	34.40	0.31	27.06	109.7	1.147
				700	5.68	34.40	0.34	27.14	102.5	1.254
				800	5.13	34.40	0.40	27.21	96.5	1.353
				1000	4.22	34.47	0.59	27.36	82.1	1.532

N. B. SCOFIELD; April 3, 1949; 2133 GCT; 24°37'N, 119°21'W; sounding, 2,250 fm; wind, 315°, force 4; weather, cloudy; sea, very rough; wire angle, 25°. 1208

0	16.45	33.96	5.33	0	16.45	33.96	5.33	24.87	309.7	0.000
9	16.45	33.84	5.61	10	16.45	33.84	5.61	24.77	318.8	0.032
23	16.34	33.86	5.76	20	16.37	33.86	5.74	24.81	315.9	0.063
45	16.27	33.87	5.66	30	16.33	33.87	5.75	24.82	314.6	0.095
67	15.90	33.80	5.67	50	16.22	33.88	5.65	24.86	311.8	0.157
89	15.58	33.78	5.62	75	15.80	33.79	5.64	24.88	310.3	0.235
132	13.93	33.49	5.19	100	15.24	33.74	5.58	24.97	302.5	0.312
174	11.07	33.71	3.98	150	12.73	33.53	4.61	25.33	269.3	0.454
258	9.74	34.27	1.94	200	10.49	33.97	3.35	26.08	198.0	0.572
344	8.85	34.38	0.66	250	9.83	34.25	2.15	26.42	167.5	0.663
518	6.84	34.34	0.33	300	9.28	34.35	1.10	26.59	152.2	0.742
789	5.09	34.42	0.44	400	8.13	34.37	0.46	26.78	134.7	0.886
1125	3.86	34.60	0.73	500	7.00	34.34	0.34	26.92	121.9	1.014
				600	6.20	34.34	0.34	27.03	112.4	1.132
				700	5.56	34.37	0.39	27.13	103.0	1.239
				800	5.03	34.43	0.46	27.24	93.0	1.337
				1000	4.22	34.54	0.62	27.42	76.9	1.507

N. B. SCOFIELD; April 4, 1949; 0354 GCT; 24°12'N, 119°55'W; sounding, 2,180 fm; wind, 315°, force 3; weather, partly cloudy; sea, rough; wire angle, 25°. 1209

0	16.51	33.96	5.38	0.37	0	16.51	33.96	5.38	0.37	24.85	311.1	0.000
14	16.52	33.91	5.52	0.37	10	16.51	33.91	5.50	0.38	24.81	315.0	0.031
27	16.48	33.95	5.56	0.35	20	16.51	33.92	5.54	0.36	24.82	314.6	0.063
50	16.42	33.93	5.56	0.35	30	16.48	33.95	5.55	0.35	24.85	312.0	0.094
72	16.30	33.95	5.49	0.32	50	16.42	33.93	5.56	0.35	24.85	312.8	0.157
95	16.08	33.89	5.55	0.35	75	16.28	33.95	5.51	0.33	24.90	309.0	0.234
139	14.93	33.67	5.54	0.42	100	16.00	33.86	5.56	0.36	24.89	310.2	0.312
184	10.92	33.57	4.41	1.21	150	14.18	33.63	5.40	0.52	25.11	290.5	0.462
272	9.17	34.20	2.38	2.03	200	10.38	33.60	3.97	1.42	25.82	223.5	0.591
360	8.10	34.23	1.32	2.54	250	9.47	34.17	2.80	1.88	26.41	167.5	0.688
537	6.45	34.42	0.46	3.01	300	8.81	34.20	1.99	2.20	26.54	155.9	0.769
801	5.01	34.45	0.44	3.16	400	7.67	34.27	0.98	2.74	26.77	135.4	0.915
1130	3.84	34.60	0.71	3.25	500	6.73	34.41	0.55	2.97	27.01	113.1	1.039
					600	6.06	34.43	0.40	3.07	27.12	103.9	1.148
					700	5.50	34.44	0.40	3.12	27.19	97.1	1.248
					800	5.02	34.45	0.45	3.16	27.26	91.3	1.342
					1000	4.25	34.54	0.59	3.22	27.42	77.2	1.511

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

1210 N. B. SCOFIELD; April 4, 1949; 1002 GCT; 23°46'N, 120°29'W; sounding, 2200 fm; wind, 340°, force 2; weather, overcast; sea, rough; wire angle, 7°.

0	16.29	33.96	5.29	0.36	0	16.29	33.96	5.29	0.36	24.90	306.2	0.000
10	16.28	33.95	5.43	0.39	10	16.28	33.95	5.43	0.39	24.90	307.1	0.031
25	-	33.89	5.41	0.28	20	16.28	33.91	5.40	0.31	24.87	310.4	0.062
50	16.25	33.82	5.34	0.35	30	16.27	33.87	5.39	0.30	24.84	313.4	0.093
75	15.91	33.86	5.37	0.28	50	16.25	33.82	5.34	0.35	24.80	317.1	0.156
100	15.09	33.73	5.40	0.34	75	15.91	33.86	5.37	0.28	24.91	307.5	0.234
150	12.50	34.14	1.03	2.22	100	15.09	33.73	5.40	0.34	24.99	300.2	0.310
200	12.24	34.38	0.34	2.45	150	12.50	34.14	1.03	2.22	25.84	220.3	0.440
300	11.10	34.43	0.56	2.42	200	12.24	34.38	0.34	2.45	26.08	199.0	0.545
400	9.46	34.49	0.58	2.49	250	11.75	34.42	0.44	2.45	26.21	188.2	0.642
600	6.44	34.42	0.28	2.85	300	11.10	34.43	0.56	2.42	26.33	177.0	0.733
900	4.82	34.52	0.42	2.94	400	9.46	34.49	0.58	2.49	26.66	146.7	0.895
1250	3.67	34.60	0.72	3.00	500	7.70	34.46	0.43	2.70	26.92	123.3	1.030
					600	6.44	34.42	0.28	2.85	27.06	109.9	1.146
					700	5.76	34.44	0.30	2.88	27.16	100.6	1.252
					800	5.27	34.48	0.35	2.91	27.25	92.5	1.348
					1000	4.45	34.55	0.51	2.97	27.40	78.9	1.520

101 HORIZON; April 30, 1949; 0538 GCT; 46°15'N, 124°50'W; sounding, missing; wind, 275°, force 2; weather, partly cloudy; sea, moderate; wire angle, 4°.

0	9.40	32.50	5.59	0	9.40	32.50	5.59		25.12	285.2	0.000
8	9.52	34.34r	5.91	10	9.52	32.50	5.93		25.10	287.2	0.029
22	9.22	32.50	6.06	20	9.23	32.50	6.05		25.15	282.9	0.057
38	9.06	32.56	6.02	30	9.17	32.51	6.07		25.16	281.4	0.085
47	8.01	32.88	5.74	50	8.03	33.33	5.26		25.98	204.3	0.134
55	8.23	33.51	-	75	8.12	33.65	2.73		26.22	182.4	0.182
70	8.11	33.64	2.78	100	8.06	33.72	2.63		26.28	176.8	0.227
138	7.86	33.82	2.51	150	7.75	33.85	2.48		26.43	163.3	0.312
219	6.92	33.98	1.96	200	7.07	33.95	2.13		26.61	147.3	0.390
307	6.37	34.02	1.46	250	6.73	34.00	1.71		26.69	139.8	0.461
395	5.82	34.07	1.22	300	6.42	34.02	1.48		26.75	135.0	0.531
482	5.34	34.05	0.95	400	5.81	34.07	1.20		26.86	124.8	0.660
				500	(5.26)	(34.05)	(0.92)		(26.97)	(120.6)	(0.783)

102 HORIZON; April 30, 1949; 1117 GCT; 46°15'N, 125°47'W; sounding, missing; wind 250°, force 2; weather, partly cloudy; sea, rough; wire angle, 36°.

0	8.60	32.57	5.31	0	8.60	32.57	5.32		25.30	268.0	0.000
7	-	32.52	5.17	10	8.63	32.52	5.17		25.26	272.4	0.027
20	8.61	32.50	5.49	20	8.61	32.50	5.49		25.33	274.0	0.054
40	8.46	32.52	4.30r	30	8.58	32.51	5.46		25.25	272.7	0.082
59	8.34	32.56	5.33	50	8.40	32.53	5.41		25.30	268.9	0.136
79	7.88	33.22	4.21	75	8.12	32.83	4.31		25.57	243.6	0.200
118	7.11	33.62	3.38	100	8.25	33.48	3.76		26.06	197.3	0.255
158	7.04	33.84	2.56	150	7.05	33.81	2.70		26.50	156.8	0.343
236	6.34	33.57r	1.91	200	6.73	33.98	2.15		26.67	140.7	0.418
315	6.06	34.07	1.32	250	6.28	34.05	1.80		26.79	130.3	0.486
473	5.10	34.04	1.88	300	6.15	34.07	1.39		26.82	123.9	0.550
716	4.20	34.29	0.40	400	5.52	34.05	1.69		26.88	122.9	0.672
994	3.58	34.49	0.32	500	4.98	34.02	1.75		26.92	119.3	0.794
				600	4.58	34.11	0.84		27.04	109.2	0.908
				700	4.26	34.27	0.42		27.20	94.4	1.010
				800	3.99	34.40	0.38		27.33	82.6	1.099
				1000	(3.58)	(34.49)	(0.31)		(27.44)	(73.0)	(1.254)

OBSERVED					INTERPOLATED					COMPUTED			SIO CCOFI 4904 4905
Z m	T °C	S ‰	O_2 ml/L	PO_4-P µg at/L	Z m	T °C	S ‰	O_2 ml/L	PO_4-P µg at/L	σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m	
HORIZON; April 30, 1949; 1725 GCT; 46°15'N, 126°44'W; sounding, missing; wind, 135°, force 4; weather, rain; sea, rough; wire angle, 35°.													103
0	8.60	32.30	3.78		0	8.60	32.30	3.77		25.09	228.0	0.000	
8	-	32.56	3.48		10	8.83	32.56	3.47		25.26	272.3	0.025	
20	8.86	32.56	5.68		20	8.86	32.56	5.68		25.25	272.8	0.052	
40	8.59	32.52	5.39		30	8.79	32.54	5.57		25.24	273.6	0.080	
58	7.66	33.46	3.33		50	7.82	32.93	4.52		25.70	231.1	0.130	
74	7.89	33.82	2.13		75	7.88	33.82	2.10		26.39	166.3	0.180	
67p	7.70	33.68	2.40		100	7.82	33.84	1.90		26.41	164.2	0.221	
115	7.75	33.84	1.85		150	7.64	33.89	1.79		26.48	158.9	0.301	
218	7.34	33.98	1.74		200	7.42	33.97	1.75		26.57	150.7	0.379	
307	6.93	33.98	1.48		250	7.18	33.98	1.64		26.61	147.3	0.453	
494	5.30	34.00	0.89		300	6.96	33.98	1.50		26.64	145.1	0.527	
786	4.12	34.25	0.40		400	6.18	33.99	1.17		26.75	135.7	0.667	
1083	3.38	34.42	0.37		500	5.27	34.00	0.88		26.87	124.4	0.797	
					600	4.78	34.06	0.61		26.98	115.2	0.918	
					700	4.38	34.16	0.45		27.10	104.0	1.026	
					800	4.07	34.26	0.40		27.21	93.7	1.125	
					1000	3.57	34.39	0.37		27.37	80.1	1.300	
HORIZON; May 1, 1949; 0711 GCT; 46°15'N, 129°35'W; sounding, missing; wind, 260°, force 4; weather, overcast; sea, very rough; wire angle, 25°.													106
0	8.9	32.59	6.12		0	8.9	32.59	6.12		25.26	271.0	0.000	
9	-	32.56	5.85		10	8.90	32.56	5.85		25.24	273.4	0.027	
22	8.81	32.65	6.08		20	8.85	32.65	6.06		25.32	266.1	0.054	
44	8.03	32.59	5.93		30	8.50	32.64	6.07		25.36	261.9	0.081	
66	7.20	32.72	6.24		50	7.75	32.60	6.00		25.44	254.6	0.132	
88	6.84	32.72	5.91		75	7.03	32.72	6.20		25.64	236.8	0.194	
132	7.02	33.24	4.59		100	6.60	32.78	5.53		25.75	227.0	0.252	
176	7.02	33.73	3.59		150	7.04	33.45	4.04		26.22	183.6	0.354	
264	5.88	33.96	3.14		200	6.74	33.84	3.46		26.56	150.9	0.437	
354	5.02	34.02	2.11		250	6.06	33.94	3.23		26.73	135.7	0.510	
533	4.18	34.11	0.91		300	5.51	33.99	2.72		26.84	125.9	0.575	
810	3.72	34.36	0.34		400	4.74	34.04	1.72		26.97	114.3	0.695	
1220	2.91	34.48	0.47		500	4.28	34.09	1.04		27.06	106.2	0.805	
					600	4.02	34.16	0.66		27.14	99.1	0.908	
					700	3.87	34.26	0.44		27.23	90.5	1.003	
					800	3.72	34.36	0.34		27.33	82.5	1.090	
					1000	3.35	34.45	0.35		27.44	73.2	1.245	
HORIZON; May 1, 1949; 2136 GCT; 46°15'N, 132°27'W; sounding, missing; wind, 270°, force 6; weather, cloudy; sea, very high; wire angle, 52°.													109
0	9.09	32.63	6.10		0	9.09	32.63	6.10		25.28	270.6	0.000	
7	-	32.66	6.67		10	9.12	32.78	6.55		25.38	260.1	0.026	
15	9.12	32.79	5.90		20	9.12	32.79	5.88		25.39	259.9	0.052	
32	9.06	32.77	5.86		30	9.09	32.78	5.88		25.38	260.2	0.078	
46	9.03	32.66	6.02		50	9.03	32.65	6.03		25.30	269.2	0.131	
72	7.92	32.65	5.82		75	7.82	32.65	5.80		25.48	252.3	0.197	
212	6.09	33.75	4.04		100	7.28	32.71	5.52		25.60	241.5	0.258	
260	5.76	33.87	3.64		150	6.63	33.21	4.87		26.08	195.9	0.368	
310	5.44[a]	34.02	2.74		200	6.17	33.70	4.19		26.52	154.4	0.455	
467	4.56	33.91	1.21		250	5.83	33.85	3.75		26.70	138.8	0.529	
1060	3.23	34.43	0.28		300	5.50	34.00	2.93		26.85	125.0	0.594	
					400	(4.92)	(33.96)	(1.63)		(26.88)	(122.2)	(0.718)	
					(500)	(4.45)	(33.91)	(1.04)		(26.89)	(121.6)	(0.840)	
					(600)	(4.12)	(33.99)	(0.68)		(27.08)	(104.4)	(0.953)	
					(700)	(3.88)	(34.13)	(0.52)		(27.13)	(100.5)	(1.055)	
					(800)	(3.67)	(34.25)	(0.35)		(27.25)	(90.1)	(1.151)	
					(1000)	(3.37)	(34.41)	(0.27)		(27.40)	(76.4)	(1.318)	

a) Middle thermometer reading of 5.02° rejected.

SIO

CCOFI

4905

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
201	HORIZON; May 4, 1949; 0131 GCT; 44°22'N, 125°03'W; sounding, missing; wind, 300°, force 2; weather, cloudy; sea, high; wire angle, 19°.											
0	10.55	32.68	6.14		0	10.55	32.68	6.14		25.06	290.1	0.000
9	10.08	32.56	6.09		10	10.00	32.56	6.10		25.07	290.2	0.029
23	9.86	32.63	6.09		20	9.87	32.59	6.11		25.11	286.0	0.058
47	9.52	34.49r	6.06		30	9.83	32.72	6.11		25.22	276.3	0.086
71	8.26	33.06	5.56		50	9.44	32.91	6.02		25.43	256.4	0.139
94	8.38	33.22	5.94		75	8.26	33.09	5.57		25.76	226.1	0.200
142	8.12	33.82	2.96		100	8.34	33.29	5.90		25.90	212.7	0.254
188	7.74	33.96	2.18		150	8.06	33.87	2.76		26.40	166.4	0.349
282	6.82	34.05	1.73		200	7.62	33.97	2.10		26.54	153.5	0.430
375	6.05	34.13	1.23		250	7.14	34.02	1.86		26.65	143.8	0.504
476p	5.46	34.22	0.74		300	6.67	34.06	1.62		26.75	135.1	0.573
559	4.94	34.31	0.58		400	5.82	34.15	1.12		26.92	119.2	0.700
1088a)	3.84	34.49	-		500	5.28	34.24	0.68		27.06	106.7	0.813
					600	4.84	34.33	-		27.19	95.9	0.915
					700	4.58	34.38	-		27.25	89.9	1.008
					800	4.34	34.42	-		27.31	85.0	1.095
					1000	3.94	34.47	-		27.39	78.6	1.259
202	HORIZON; May 3, 1949; 2145 GCT; 44°19'N, 125°49'W; sounding, missing; wind, 300°, force 1; weather, cloudy; sea, high; wire angle, 18°.											
0	10.29	32.70	6.02		0	10.29	32.70	6.02		25.13	284.4	0.000
9	10.06	32.56	5.98		10	10.05	32.56	5.97		25.06	291.0	0.029
23	9.79	32.52	6.05		20	9.83	32.53	6.04		25.08	289.8	0.058
47	9.62	32.70	6.09		30	9.73	32.52	6.09		25.08	289.3	0.087
71	8.56	32.68	5.77		50	9.62	32.70	6.09		25.24	274.5	0.143
94	8.15	33.30	4.60		75	8.50	32.68	5.65		25.40	259.5	0.210
142	7.74	33.77	2.86		100	8.11	33.36	4.20		25.99	204.2	0.268
189	7.31	33.95	2.60		150	7.65	33.82	2.80		26.42	164.2	0.360
284	6.59	34.00	1.69		200	7.24	33.95	2.51		26.58	149.6	0.438
378	5.77	34.22	1.29		250	6.86	33.98	2.01		26.66	142.9	0.512
566	4.83	34.23	0.61		300	6.43	34.03	1.62		26.75	134.4	0.581
853	3.88	34.45	0.40		400	5.67	34.22	1.18		27.00	111.7	0.704
1148	3.28	34.52	0.46		500	5.15	34.23	0.78		27.07	105.9	0.812
					600	4.73	34.24	0.55		27.13	100.2	0.916
					700	4.37	34.32	0.44		27.23	92.1	1.012
					800	4.05	34.41	0.41		27.33	82.6	1.100
					1000	3.55	34.50	0.44		27.46	71.8	1.254
203	HORIZON; May 3, 1949; 1726 GCT; 44°18'N, 126°38'W; sounding, missing; wind, 300°, force 3; weather, cloudy; sea, high; wire angle, 17°.											
0	9.40	32.72	6.19		0	9.40	32.72	6.19		25.29	269.3	0.000
9	9.44	32.54	6.19		10	9.45	32.54	6.20		25.14	283.1	0.028
23	9.42	32.57	6.08		20	9.44	32.57	6.11		25.17	280.8	0.056
47	8.73	32.56	6.15		30	9.45	32.57	6.11		25.17	281.2	0.084
70	7.40	32.66	5.95		50	8.02	32.57	6.14		25.39	260.6	0.138
94	7.44	33.21	4.42		75	7.32	32.75	5.82		25.63	238.3	0.213
142	7.46	33.84	2.55		100	7.44	33.30	3.85		26.04	199.2	0.268
188	6.94	33.98	2.51		150	7.35	33.88	2.55		26.51	155.6	0.356
283	6.19	34.11	1.66		200	6.89	34.00	2.44		26.67	141.4	0.431
377	5.39	34.07	1.38		250	6.52	34.09	1.91		26.79	130.3	0.499
566	4.68	34.23	0.61		300	6.02	34.11	1.59		26.87	123.8	0.562
855	3.84	34.42	0.41		400	5.29	34.07	1.30		26.93	118.1	0.682
1150	3.18	34.49	0.49		500	4.92	34.16	0.84		27.04	108.2	0.797
					600	4.57	34.26	0.55		27.16	97.8	0.899
					700	4.27	34.34	0.44		27.26	89.3	0.993
					800	4.00	34.39	0.41		27.32	83.5	1.079
					1000	3.52	34.47	0.45		27.44	73.7	1.236

a) Curve interpolated between 559 and 1088 meters depth.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	µg at/L	m	°C	‰	ml/L	µg at/L	g/L	$10^5 cm^3/g$	dyn. m	
HORIZON; May 3, 1949; 1040 GCT; 44°14'N, 127°41'W; sounding, missing; wind, 315°, force 3; weather, partly cloudy; sea, high; wire angle, 40°.													204
0	9.4	32.61	6.10		0	9.4	32.61	6.10		25.21	277.3	0.000	
7	9.48	32.54	6.02		10	9.48	32.53	6.06		25.14	284.3	0.028	
18	9.49	32.48	6.16		20	9.48	32.48	6.16		25.10	288.1	0.057	
38	9.48	32.54	6.16		30	9.48	32.50	6.16		25.11	286.8	0.086	
57	9.05	32.50	6.14		50	9.46	32.52	6.16		25.13	285.3	0.143	
76	7.73	32.65	5.85		75	7.88	32.66	5.90		25.48	252.3	0.210	
114	7.62	33.42	4.13		100	7.66	33.23	4.95		25.96	207.5	0.267	
152	7.69	33.80	2.97		150	7.67	33.78	3.00		26.39	167.3	0.361	
230	6.86	33.87	2.44		200	7.28	33.86	2.77		26.50	156.8	0.442	
306	6.26	33.87	1.84		250	6.68	33.87	2.53		26.60	148.7	0.519	
460	5.28	33.95	1.20		300	6.33	33.87	2.20		26.64	145.0	0.592	
708	4.32	34.22	0.48		400	5.63	33.91	1.53		26.76	134.6	0.731	
1100	3.34[a]	34.36	0.40		500	5.11	33.98	1.03		26.88	124.1	0.861	
					600	4.70	34.10	0.71		27.02	111.4	0.979	
					700	4.37	34.21	0.52		27.14	100.2	1.084	
					800	4.07	34.29	0.41		27.24	91.7	1.180	
					1000	3.58	34.35	0.38		27.33	83.4	1.356	
HORIZON; May 3, 1949; 0345 GCT; 44°12'N, 128°38'W; sounding, missing; wind, 315°, force 4; weather, cloudy; sea, very high; wire angle, 48°.													205
0	9.9	32.57	5.70		0	9.95	32.57	5.70		25.09	288.4	0.000	
7	9.78	32.59	5.54		10	9.78	32.59	5.56		25.13	284.5	0.029	
17	9.78	32.57	5.85		20	9.75	32.56	5.86		25.11	286.4	0.057	
34	9.49	32.40	5.70		30	9.52	32.56	5.74		25.15	283.1	0.086	
51	9.27	32.57	5.76		50	9.27	32.57	5.75		25.20	278.7	0.142	
68	8.36	32.72	5.62		75	8.27	32.93	5.32		25.63	237.9	0.206	
100	8.00	33.44	4.17		100	8.00	33.44	4.17		26.07	196.4	0.261	
130	7.58	33.77	3.33		150	7.43	33.86	3.00		26.48	158.2	0.349	
182	7.12	33.93	2.56		200	6.83	33.95	2.46		26.64	143.9	0.425	
230	6.50	33.96	2.40		250	6.31	33.97	2.31		26.72	136.7	0.495	
338p	5.80	34.02	1.44		300	6.00	33.99	1.86		26.77	132.0	0.562	
574p	4.69	34.27	0.44		400	5.42	34.08	1.05		26.92	119.3	0.693	
1018	3.38	34.45	0.48		500	4.98	34.19	0.68		27.06	106.8	0.801	
					600	(4.60)	(34.30)	(0.42)		(27.19)	(95.3)	(0.903)	
					700	(4.25)	(34.37)	(0.40)		(27.28)	(86.9)	(0.994)	
					800	(3.95)	(34.41)	(0.40)		(27.34)	(81.4)	(1.078)	
					1000	(3.41)	(34.45)	(0.48)		(27.43)	(74.1)	(1.229)	
HORIZON; May 2, 1949; 2130 GCT; 44°01'N, 129°33'W; sounding, missing; wind, 290°, force 5; weather, cloudy; sea, very high; wire angle, 20°.													206
0	9.15	32.68	6.22		0	9.15	32.68	6.22		25.30	268.0	0.000	
9	9.34	32.63	6.18		10	9.35	32.63	6.17		25.23	274.8	0.027	
23	9.31	32.68	6.14		20	9.34	32.67	6.15		25.26	271.4	0.054	
46	8.84	32.70	6.14		30	9.20	32.69	6.14		25.30	268.8	0.082	
70	8.15	32.79	6.25		50	8.76	32.71	6.15		25.38	261.2	0.134	
113	7.51	33.13	5.28		75	8.04	32.82	5.98		25.58	243.1	0.198	
233p	8.63r	33.95r	4.19r		100	7.67	33.02	5.56		25.79	224.2	0.256	
373	4.98	34.04	1.95		150	7.02	33.42	4.23		26.19	185.5	0.358	
466	4.50	34.11	0.98		200	6.42	33.72	3.28		26.51	155.9	0.443	
561	4.25	34.22	0.81		250	5.93	33.89	2.75		26.70	137.5	0.517	
845	3.65	34.43	0.41		300	5.52	33.97	2.39		26.82	127.7	0.583	
1303p	3.21	34.52	0.57		400	4.81	34.06	1.71		26.97	113.5	0.704	
					500	4.40	34.15	0.87		27.09	103.1	0.812	
					600	4.17	34.26	0.78		27.20	93.3	0.911	
					700	3.96	34.34	0.47		27.29	85.7	1.000	
					800	3.74	34.40	0.42		27.36	79.8	1.082	
					1000	3.43	34.48	0.44		27.45	72.0	1.234	

a) Middle thermometer reading of 3.74° rejected.

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4905

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

301 HORIZON; May 4, 1949; 1224 GCT; 42°40'N, 125°11'W; sounding, missing; wind, 315°, force 2; weather, partly cloudy; sea, high; wire angle, 21°.

0	10.5	32.72	5.85	0	10.5	32.72	5.85	25.12	285.6	0.000
9	10.48	32.72	5.94	10	10.49	32.72	5.95	25.11	286.5	0.029
23	10.46	32.63	6.06	20	10.48	32.63	6.05	25.05	292.8	0.058
46	9.76	32.75	6.10	30	10.24	32.64	6.09	25.09	288.4	0.087
69	8.61	33.22	5.21	50	9.65	32.83	6.00	25.34	265.7	0.142
93	8.37	33.69	3.25	75	8.55	33.36	4.35	25.93	210.3	0.202
140	7.99	33.95	2.44	100	8.31	33.76	3.00	26.28	177.3	0.250
186	7.46	34.00	2.03	150	7.85	33.93	2.32	26.48	158.9	0.334
280	6.64	34.10	1.67	200	7.32	34.02	1.97	26.63	145.4	0.410
374	6.00	34.14	1.22	250	6.89	34.07	1.77	26.72	136.8	0.481
562	4.94	34.23	0.49	300	6.51	34.11	1.59	26.81	129.4	0.548
850	3.94	34.36	0.41	400	5.84	34.15	1.07	26.92	119.4	0.671
1144	3.18	34.45	-	500	5.27	34.20	0.57	27.03	109.5	0.787
				600	4.78	34.25	0.45	27.13	101.3	0.892
				700	4.42	34.30	0.42	27.21	93.8	0.989
				800	4.09	34.34	0.42	27.28	88.1	1.080
				1000	3.53	34.41	-	27.39	78.3	1.246

302 HORIZON; May 4, 1949; 1720 GCT; 42°36'N, 125°52'W; sounding, missing; wind, 090°, force 1; weather, cloudy; sea, rough; wire angle, 7°.

0	10.78	32.72	6.10	0	10.78	32.72	6.10	25.06	291.2	0.000
10	10.92	32.65	6.10	10	10.92	32.65	6.10	24.99	298.2	0.030
24	10.82	32.64	6.26	20	10.87	32.64	6.25	24.98	298.6	0.059
49	9.72	32.84	6.18	30	10.89	32.65	6.25	24.98	298.4	0.089
74	9.04	33.10	5.69	50	9.70	32.84	6.18	25.34	265.8	0.146
98	8.11	33.49	5.61	75	9.03	33.10	5.70	25.65	236.6	0.208
148	7.77	33.87	2.68	100	8.10	33.51	5.40	26.11	193.3	0.262
198	7.08	33.95	2.44	150	7.77	33.88	2.67	26.45	161.6	0.351
297	5.88	33.98	-	200	7.05	33.95	2.41	26.61	147.2	0.429
396	5.50	34.05	0.89	250	6.34	33.97	2.11	26.72	137.1	0.499
595	4.66	34.18	0.65	300	5.85	33.98	1.67	26.79	130.8	0.566
893	3.91	34.38	0.37	400	5.49	34.05	0.86	26.89	122.4	0.692
1191	3.11	34.58u	0.65	500	5.04	34.12	0.70	27.00	112.8	0.810
				600	4.65	34.18	0.64	27.09	104.8	0.920
				700	4.39	34.25	0.55	27.17	97.3	1.020
				800	4.14	34.32	0.45	27.25	90.3	1.114
				1000	3.61	34.45	0.44	27.41	76.4	1.281

303 HORIZON; May 4, 1949; 2255 GCT; 42°29'N, 126°55'W; sounding, missing; wind, 180°, force 1; weather, cloudy; sea, rough; wire angle, 14°.

0	10.10	32.52	6.13	0	10.10	32.52	6.13	25.02	294.5	0.000
9	10.26	32.52	6.21	10	10.24	32.52	6.22	25.00	296.9	0.030
23	10.12	32.36	6.21	20	10.09	32.36	6.23	24.90	306.5	0.060
48	9.60	32.57	6.01	30	10.05	32.37	6.16	24.91	305.4	0.090
72	8.04	32.47	6.14	50	9.48	32.57	6.02	25.17	281.9	0.149
96	7.94	33.03	4.66	75	7.91	32.47	5.90	25.32	266.9	0.218
145	7.30	33.73	3.36	100	7.86	33.14	4.54	25.86	216.9	0.278
193	6.92	33.86	2.54	150	7.25	33.76	3.27	26.43	163.2	0.373
291	6.20	33.86	1.72	200	6.87	33.86	2.49	26.56	151.5	0.451
387	5.54	34.04	1.10	250	6.49	33.86	2.03	26.61	147.0	0.527
579	4.76	34.16	0.74	300	6.13	33.87	1.65	26.67	142.5	0.599
873	3.75	34.29	0.37	400	5.48	34.05	1.06	26.89	122.3	0.731
1171	3.08	34.45	0.49	500	5.06	34.12	0.82	26.99	113.0	0.849
				600	4.67	34.17	0.69	27.08	105.7	0.958
				700	4.31	34.21	0.56	27.15	99.4	1.061
				800	3.97	34.25	0.44	27.22	93.5	1.157
				1000	3.42	34.36	0.43	27.36	80.6	1.331

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

HORIZON; May 5, 1949; 0440 GCT; 42°25'N, 127°41'W; sounding, missing; wind, 180°, force 1; weather, fog; sea, rough; wire angle, 04°. 304

0	11.6	32.95	5.73	0	11.6	32.95	5.73	25.10	287.9	0.000
10	11.60	32.95	6.19	10	11.60	32.95	6.19	25.09	288.2	0.029
25	11.38	32.94	6.19	20	11.50	32.94	6.20	25.10	287.6	0.058
50	10.42	32.94	6.26	30	11.10	32.94	6.22	25.18	280.9	0.086
74	9.27	33.19	5.54	50	10.42	32.94	6.26	25.29	270.0	0.141
99	8.87	33.44	4.76	75	9.27	33.20	5.55	25.69	233.0	0.204
149	8.34	33.86	2.80	100	8.88	33.45	4.77	25.95	208.8	0.259
198	7.76	34.00	2.28	150	8.33	33.87	2.78	26.36	170.3	0.354
298	6.88	34.02	1.95	200	7.74	34.00	2.28	26.55	153.0	0.434
398	5.94	34.09	1.30	250	7.32	34.01	2.15	26.62	147.1	0.510
596	4.97	34.14	0.85	300	6.86	34.02	1.95	26.69	140.9	0.581
895	3.81	34.40	0.41	400	5.93	34.09	1.28	26.87	124.9	0.714
1194	3.10	34.45	0.65	500	5.42	34.12	0.98	26.95	117.5	0.836
				600	4.95	34.14	0.85	27.02	111.3	0.950
				700	4.54	34.22	0.69	27.13	101.3	1.056
				800	4.15	34.32	0.53	27.25	90.3	1.152
				1000	3.48	34.43	0.46	27.41	76.4	1.320

HORIZON; May 11, 1949; 0042 GCT; 42°21'N, 128°35'W; sounding, missing; wind, 315°, force 3; weather, overcast; sea, moderate; wire angle, 27°. 305

0	12.2	32.74	5.32	0	12.2	32.74	5.32	24.83	313.4	0.000
8	12.10	32.75	5.57	10	12.10	32.75	5.57	24.85	311.8	0.031
21	11.19	32.73	5.32	20	11.20	32.73	5.33	25.00	297.8	0.062
43	10.40	32.79	5.45	30	10.74	32.75	5.37	25.09	289.0	0.091
65	9.60	32.74	5.45	50	10.21	32.79	5.47	25.21	277.5	0.148
86	8.46	32.74	5.19	75	9.08	32.74	5.35	25.36	264.1	0.216
129	7.56	33.40	4.18	100	8.03	32.80	4.95	25.58	244.5	0.279
171	7.24	33.84	3.14	150	7.43	33.69	3.50	26.35	170.9	0.383
255	6.28	33.95	2.78	200	6.90	33.88	2.95	26.57	150.4	0.463
340	5.94	34.09	1.30	250	6.32	33.94	2.80	26.70	139.0	0.536
513	5.04	34.14	1.17	300	6.08	34.04	2.12	26.81	129.1	0.602
781	4.13	34.33	0.38	400	5.65	34.11	1.20	26.91	120.1	0.727
1066	3.39	34.58	0.46	500	5.12	34.13	1.18	27.00	112.9	0.843
				600	4.73	34.18	0.97	27.08	105.7	0.952
				700	4.38	34.26	0.55	27.18	96.4	1.054
				800	4.08	34.35	0.36	27.28	87.3	1.146
				1000	3.55	34.54	0.40	27.49	69.1	1.303

HORIZON; May 10, 1949; 1940 GCT; 42°19'N, 129°30'W; sounding, missing; wind, calm; weather, overcast; sea, slight; wire angle, 4°. 306

0	11.6	32.74	6.36	0	11.6	32.74	6.36	24.92	304.6	0.000
10	10.24	32.68	6.40	10	10.24	32.68	6.40	25.12	285.1	0.030
25	9.72	32.65	6.58	20	9.83	32.65	6.55	25.16	280.9	0.058
49	8.95	32.68	6.24	30	9.62	32.65	6.56	25.20	277.9	0.086
74	7.74	32.72	6.20	50	8.90	32.68	6.25	25.34	265.1	0.140
99	7.52	32.84	5.40	75	7.73	32.73	6.20	25.55	245.4	0.204
148	7.19	33.64	4.38	100	7.51	32.85	5.35	25.68	233.8	0.264
198	6.66	33.90	3.62	150	7.15	33.67	4.35	26.37	168.7	0.364
298	5.68	33.96	2.70	200	6.64	33.90	3.65	26.62	145.4	0.442
398	4.99	33.99	1.69	250	6.14	33.94	3.02	26.72	136.7	0.513
598	4.46	34.14	0.84	300	5.65	33.96	2.70	26.80	129.9	0.580
897	3.67	34.42	0.38	400	4.99	33.99	1.65	26.90	120.8	0.705
1196	2.98	34.52	0.51	500	4.73	34.05	1.15	26.98	114.3	0.823
				600	4.45	34.14	0.85	27.08	105.4	0.932
				700	4.19	34.25	0.60	27.19	95.0	1.033
				800	3.93	34.35	0.45	27.30	85.7	1.124
				1000	3.40	34.46	0.43	27.44	73.0	1.282

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

307 HORIZON; May 10, 1949; 1528 GCT; 42°11'N, 130°22'W; sounding, missing; wind, 225°, force 2; weather, cloudy; sea, moderate; wire angle, 14°.

0	11.62	32.74	6.18	0	11.62	32.74	6.18	24.93	304.0	0.000
9	11.32	32.68	6.31	10	11.32	32.68	6.31	24.94	303.0	0.030
24	10.29	32.75	6.14	20	10.40	32.74	6.17	25.14	283.8	0.060
48	10.10	32.73	6.14	30	10.26	32.74	6.15	25.17	281.7	0.088
73	8.91	32.73	6.10	50	9.95	32.73	6.15	25.21	277.8	0.144
96	8.08	32.74	5.98	75	8.84	32.73	6.10	25.39	261.3	0.211
145	7.30	33.02	5.47	100	7.96	32.74	5.95	25.53	248.2	0.275
194	7.44	33.66	4.19	150	7.31	33.07	5.37	25.88	215.3	0.391
291	6.09	33.93	3.15	200	7.44	33.70	4.11	26.36	171.1	0.487
388	5.27	34.02	2.12	250	6.75	33.86	3.54	26.58	150.5	0.567
582	4.62	34.14	0.79	300	5.99	33.94	3.07	26.74	135.4	0.639
874	3.69	34.36	0.37	400	5.24	34.03	2.00	26.90	121.0	0.768
1168	3.02	34.49	0.42	500	4.90	34.09	1.23	26.99	113.4	0.885
				600	4.58	34.15	0.74	27.07	106.2	0.995
				700	4.26	34.23	0.51	27.17	97.3	1.096
				800	3.94	34.31	0.39	27.27	88.8	1.189
				1000	3.34	34.42	0.38	27.41	75.3	1.353

308 HORIZON; May 10, 1949; 0940 GCT; 42°06'N, 131°15'W; sounding, missing; wind, 200°, force 2; weather, cloudy; sea, moderate; wire angle, 23°.

0	12.8	32.88	5.73	0	12.8	32.88	5.73	24.80	315.7	0.000
8	12.78	32.77	5.64	10	12.78	32.77	5.65	24.73	322.8	0.032
22	12.16	32.97	5.89	20	12.69	32.97	5.90	24.90	306.6	0.063
44	11.71	32.81	5.68	30	12.02	32.94	5.85	25.01	296.9	0.094
65	11.12	32.88	5.81	50	11.53	32.82	5.70	25.00	297.5	0.153
86	10.28	32.81	5.60	75	11.00	32.84	5.70	25.12	287.4	0.226
125	8.86	33.30	4.73	100	9.58	32.90	5.37	25.40	260.3	0.295
161	7.96	33.77	3.32	150	8.19	33.64	3.62	26.20	185.5	0.406
223	7.10	33.95	2.82	200	7.41	33.93	2.97	26.54	153.5	0.491
275	6.15	33.84	2.08	250	6.61	33.89	2.51	26.62	146.4	0.566
391	5.87	34.04	1.74	300	6.03	33.86	1.95	26.67	142.0	0.638
594	4.46	34.14	0.75	400	5.85	34.04	1.70	26.84	127.6	0.773
830	3.80	34.42	0.25	500	5.21	34.08	1.26	26.94	117.8	0.896
				600	4.45	34.14	0.73	27.08	105.5	1.007
				700	4.15	34.26	0.43	27.21	93.8	1.107
				800	3.89	34.39	0.27	27.34	82.2	1.195
				1000	(3.46)	(34.49)	-	(27.46)	(71.5)	(1.349)

309 HORIZON; May 10, 1949; 0300, 0335 GCT; 42°02'N, 132°10'W; sounding, missing; wind, 180°, force 2; weather, cloudy; sea, moderate; wire angle, 10°, missing.

0	11.87	32.83	6.14	0	11.87	32.83	6.14	24.96	301.3	0.000
10	11.87	32.81	6.03	10	11.87	32.81	6.03	24.94	303.2	0.030
25	11.01	32.79	6.43	20	11.16	32.80	6.37	25.06	291.8	0.060
49	10.60	32.76	6.35	30	10.95	32.78	6.41	25.08	290.1	0.089
73	9.37	32.81	6.35	50	10.55	32.76	6.35	25.13	285.3	0.147
98	8.99	32.83	6.10	75	9.39	32.81	6.35	25.37	263.6	0.215
148	7.77	32.94	5.86	100	8.98	32.83	6.09	25.44	256.5	0.280
196	7.44	33.53	4.62	150	7.75	32.95	5.83	25.72	230.3	0.402
295	6.62	33.91	3.62	200	7.41	33.58	4.60	26.27	179.6	0.504
393	5.34	33.96	2.35	250	7.12	33.84	4.02	26.51	157.1	0.588
				300	6.53	33.91	3.55	26.65	144.5	0.664
590	4.43	34.14	0.70	400	5.30	33.97	2.30	26.85	126.0	0.799
886	3.64	34.42	0.37	500	4.77	34.05	1.30	26.97	115.0	0.870
1181	3.04	34.58	0.41	600	4.40	34.15	0.69	27.09	104.3	0.979
				700	4.11	34.25	0.48	27.20	94.0	1.078
				800	3.85	34.35	0.39	27.31	84.8	1.168
				1000	3.40	34.49	0.38	27.46	70.9	1.324

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

HORIZON; May 9, 1949; 2142 GCT; 41°57'N, 133°04'W; sounding, missing; wind, 190°, force 3; weather, partly cloudy; sea, rough; wire angle, 17°. 310

0	11.98	32.92	5.96	0	11.98	32.92	5.96	25.00	296.9	0.000
10	12.18	32.88	6.12	10	12.18	32.88	6.12	24.93	303.7	0.030
24	11.81	32.92	5.87	20	11.93	32.92	5.92	25.01	296.3	0.060
48	11.25	32.88	6.12	30	11.67	32.91	5.90	25.05	292.8	0.089
71	10.70	32.93	6.00	50	11.19	32.88	6.10	25.11	287.2	0.148
96	9.90	32.92	5.83	75	10.60	32.93	5.97	25.26	274.2	0.218
143	8.41	33.28	5.01	100	9.40	32.92	5.77	25.45	255.9	0.284
191	7.72	33.66	4.81	150	8.29	33.33	4.94	25.94	209.8	0.401
286	6.92	33.93	3.69	200	7.64	33.72	4.77	26.34	172.5	0.496
382	5.80	33.95	2.71	250	7.25	33.89	4.17	26.53	154.9	0.577
575	4.42	34.07	1.60	300	6.80	33.93	3.54	26.62	146.8	0.653
866	3.68	34.36	0.41	400	5.60	33.95	2.59	26.79	131.3	0.792
1161	3.04	34.46	0.45	500	4.77	34.01	2.00	26.94	117.7	0.917
				600	4.37	34.10	1.48	27.05	107.6	1.030
				700	4.10	34.22	1.00	27.18	96.2	1.132
				800	3.85	34.31	0.60	27.27	87.8	1.224
				1000	3.35	34.42	0.36	27.41	75.5	1.387

HORIZON; May 6, 1949; 1805, 1855 GCT; 40°50'N; 124°50'W; sounding, missing; wind, 185°, force 1; weather, cloudy; sea, rough; wire angle, 25°, missing. 401

0	11.58	32.68	5.94	0	11.58	32.68	5.94	24.89	307.3	0.000
8	11.44	32.66	6.30	10	11.33	32.66	6.30	24.91	304.7	0.031
21	10.81	32.61	6.46	20	10.83	32.61	6.43	24.97	300.2	0.061
43	9.61	33.03	5.56	30	10.38	32.71	6.40	25.12	285.7	0.090
64	9.04	33.37	5.11	50	9.35	33.18	5.39	25.66	234.9	0.142
85	8.82	33.49	4.08	75	8.92	33.45	4.60	25.94	208.9	0.198
				100	8.75	33.60	3.58	26.08	195.7	0.248
250	6.78	34.09	1.68	150	8.29	33.85	2.85	26.35	171.2	0.340
334	6.44	34.13	0.98	200	7.48	34.00	2.28	26.59	149.3	0.421
504	5.13	34.00u	1.27u	250	6.78	34.09	1.68	26.75	133.6	0.491
765	4.40	34.33	0.41	300	6.57	34.13	1.17	26.81	128.7	0.556
1037	3.66	34.40	0.37	400	5.78	34.07	0.96	26.87	124.5	0.682
				500	5.15	34.00	1.27	26.89	123.2	0.806
				600	4.86	34.10	0.95	27.00	113.2	0.926
				700	4.57	34.28	0.58	27.18	97.2	1.030
				800	4.29	34.34	0.39	27.25	90.5	1.124
				1000	3.74	34.39	0.36	27.35	82.3	1.297

HORIZON; May 7, 1949; 0015 GCT; 40°42'N, 125°41'W; sounding, missing; wind, 315°, force 2; weather, overcast; sea, indeterminate; wire angle, 10°. 402

0	12.48	32.86	5.50	0	12.48	32.86	5.50	24.86	310.4	0.000
10	11.91	32.84	5.79	10	11.91	32.84	5.79	24.95	302.3	0.031
24	11.41	32.83	6.08	20	11.56	32.83	5.99	25.01	296.6	0.061
48	9.36	33.13	5.50	30	10.94	32.84	6.08	25.13	285.5	0.090
73	9.02	33.41	4.84	50	9.36	33.12	5.43	25.61	239.6	0.142
98	8.73	33.71	3.37	75	9.01	33.41	4.77	25.89	213.3	0.199
147	8.16	33.96	2.59	100	8.70	33.70	3.38	26.17	187.6	0.249
196	7.60	34.05	1.97	150	8.10	33.96	2.52	26.46	160.4	0.336
295	6.88	34.14	1.40	200	7.57	34.06	1.93	26.62	146.0	0.413
393	5.68	34.07	1.44	250	7.22	34.12	1.56	26.72	137.5	0.483
590	5.18	34.33	0.33	300	6.83	34.14	1.38	26.79	131.3	0.551
1062	4.06	34.47	0.33	400	5.63	34.07	1.43	26.89	122.6	0.677
				500	5.26	34.22	1.01	27.05	108.0	0.793
				600	5.18	34.34	0.32	27.15	99.3	0.897
				700	5.00	34.40	0.30	27.22	93.6	0.993
				800	4.73	34.44	0.28	27.28	88.5	1.084
				1000	4.19	34.47	0.31	27.37	81.6	1.255

SIO

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4905

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
403	HORIZON; May 7, 1949; 0610 GCT; 40°43'N; 126°35'W; sounding, missing; wind, 315°, force 3; weather, overcast; sea, rough; wire angle, 26°											
0	12.38	32.88	6.17		0	12.38	32.88	6.17		24.90	306.8	0.000
9	12.27	32.88	6.22		10	12.23	32.88	6.22		24.92	304.6	0.031
22	11.95	32.84	6.34		20	11.99	32.84	6.32		24.94	303.6	0.061
44	11.09	33.04	6.22		30	11.67	32.86	6.31		25.01	296.6	0.091
67	10.04	33.17	5.92		50	10.75	33.07	6.15		25.34	265.6	0.147
87	9.76	33.49	4.98		75	9.93	33.28	5.70		25.64	237.2	0.210
131	9.04	33.80	3.06		100	9.55	33.59	4.19		25.95	208.7	0.266
174	8.36	34.02	2.25		150	8.73	33.91	2.64		26.33	173.3	0.361
260	7.32	34.11	1.96		200	8.02	34.06	2.12		26.55	152.5	0.442
347	6.56	34.23	1.31		250	7.44	34.10	2.00		26.67	142.2	0.516
520	5.63	34.20	0.98		300	6.93	34.18	1.68		26.80	129.8	0.584
988u	4.66	34.36	0.33		400	6.11	34.22	1.17		26.94	117.8	0.708
					500	5.67	34.20	1.02		26.99	114.4	0.824
					600	5.43	34.25	0.75		-	-	-
					700	5.21	34.30	0.52		-	-	-
					800	5.00	34.34	0.40		-	-	-
					1000	(4.61)	(34.37)	(0.33)		-	-	-
404	HORIZON; May 7, 1949; 1207, 1315 GCT; 40°23'N, 127°23'W; sounding, missing; wind, 280°, force 3; weather, drizzle; sea, rough; wire angle, 32°, 25°.											
0	12.18	32.79	6.34		0	12.18	32.79	6.34		24.86	310.1	0.000
8	12.35	32.83	6.21		10	12.37	32.83	6.21		24.86	311.0	0.031
21	12.35	32.84	6.26		20	12.36	32.84	6.26		24.87	310.2	0.062
42	10.24	32.84	6.42		30	11.20	32.84	6.35		25.08	289.9	0.092
63	9.42	32.88	6.10		50	9.87	32.85	6.33		25.32	267.4	0.148
84	8.89	33.06	5.69		75	9.16	32.94	5.90		25.50	250.7	0.213
					100	8.15	33.30	5.10		25.94	209.2	0.270
127	7.78	-	3.46		150	7.56	33.82	3.22		26.43	162.9	0.363
170	7.35	33.91	3.02		200	6.99	33.96	2.65		26.62	145.7	0.440
255	6.38	34.04	2.06		250	6.42	34.04	2.11		26.76	132.8	0.510
340	5.82	34.13	1.40		300	6.12	34.09	1.63		26.84	126.0	0.574
510	4.64	34.18	0.66		400	5.14	34.15	1.07		27.01	110.9	0.693
1044	4.05	34.33	0.49		500	4.66	34.17	0.69		27.08	104.5	0.800
					600	4.47	34.23	0.46		27.15	98.8	0.903
					700	4.33	34.28	0.37		27.20	94.6	0.999
					800	4.21	34.31	0.38		27.24	91.9	1.093
					1000	4.11	34.32	0.48		27.26	91.6	1.296
405	HORIZON; May 7, 1949; 1830, 1905 GCT; 40°13'N, 128°10'W; sounding, missing; wind, 270°, force 2; weather, partly cloudy; sea, rough; wire angle, 13°, 18°.											
0	12.29	32.90	5.88		0	12.29	32.90	5.88		24.92	304.2	0.000
10	11.74	32.74	6.12		10	11.74	32.74	6.12		24.90	306.7	0.031
24	10.86	32.66	6.12		20	11.04	32.66	6.13		24.97	300.0	0.061
48	10.53	32.70	5.96		30	10.76	32.66	6.11		25.02	295.5	0.091
71	9.70	32.95	5.64		50	10.48	32.70	5.93		25.10	288.4	0.149
95	7.97[a]	33.24	5.06		75	9.34	32.96	5.59		25.49	251.8	0.217
					100	7.94	33.27	4.86		25.95	208.3	0.274
142	7.90[b]	33.77	3.35		150	7.84	33.80	3.24		26.38	168.3	0.368
189	7.44	33.87	2.82		200	7.35	33.87	2.74		26.50	157.2	0.449
284	6.24	33.82	2.12		250	6.75	33.83	2.37		26.55	152.6	0.527
378	5.16	33.96	1.67		300	6.00	33.83	2.07		26.65	143.9	0.601
570	4.76	34.07	0.90		400	5.12	33.99	1.58		26.88	122.7	0.734
861	3.85	34.29	0.41		500	4.88	34.07	1.16		26.98	114.5	0.853
1159	3.06	34.52	0.57		600	4.68	34.07	0.82		27.00	113.2	0.967
					700	4.36	34.11	0.58		27.06	107.3	1.077
					800	3.99	34.20	0.44		27.17	97.4	1.180
					1000	3.32	34.43	0.46		27.42	74.4	1.352

a) Middle thermometer reading of 8.65° rejected.
b) Middle thermometer reading of 7.75° rejected.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	
HORIZON; May 8, 1949; 0535 GCT; 40°05'N, 129°03'W; sounding, missing; wind, 225°, force 3; weather, cloudy; sea, very rough; wire angle, 22°.													406
0	12.23	32.70	5.88		0	12.23	32.70	5.88		24.78	317.5	0.000	
9	11.56	32.75	5.96		10	11.55	32.75	5.96		24.95	302.2	0.031	
22	11.11	32.77	6.04		20	11.14	32.77	6.05		25.04	293.8	0.061	
45	10.70	32.75	5.88		30	10.97	32.77	6.04		25.07	291.2	0.090	
68	9.63	32.75	6.04		50	10.51	32.75	5.92		25.13	285.2	0.148	
90	9.00	32.68	6.04		75	9.42	32.74	6.09		25.30	269.4	0.217	
136	8.13	33.35	4.70		100	8.73	32.70	5.74		25.38	262.1	0.284	
182	7.77	33.66	4.04		150	8.00	33.45	4.50		26.08	196.7	0.398	
274	6.82	34.09	2.86		200	7.62	33.78	3.77		26.39	167.6	0.489	
365	5.86	33.98	2.04		250	7.07	34.06	3.15		26.69	140.1	0.566	
548	4.91	34.13	0.61		300	6.51	34.06	2.63		26.77	133.2	0.634	
823	3.87	34.40	0.41		400	5.65	33.99	1.69		26.82	128.8	0.765	
1212	3.04	34.44	0.73		500	5.13	34.08	0.87		26.95	116.8	0.888	
					600	4.68	34.20	0.52		27.10	103.6	0.999	
					700	4.28	34.32	0.40		27.24	90.8	1.096	
					800	3.93	34.39	0.41		27.33	82.7	1.182	
					1000	3.44	34.43	0.55		27.41	75.8	1.341	
HORIZON; May 8, 1949; 1200 GCT; 39°56'N, 129°55'W; sounding, missing; wind, 270°, force 4; weather, rain showers; sea, high; wire angle, 30°.													407
0	12.39	32.77	5.85		0	12.39	32.77	5.85		24.80	315.8	0.000	
8	12.57	32.75	5.90		10	12.56	32.75	5.91		24.76	320.2	0.032	
21	12.38	32.84	6.02		20	12.39	32.84	6.02		24.86	310.8	0.063	
42	11.41	32.83	6.02		30	12.12	32.84	6.04		24.91	306.1	0.094	
64	9.94	32.88	6.14		50	10.68	32.84	6.06		25.17	281.5	0.153	
85	9.34	32.74	6.26		75	9.58	32.86	6.22		25.37	262.7	0.221	
138	8.97	32.84	5.61		100	9.26	32.75	6.18		25.34	266.5	0.287	
171	7.96	33.57	4.39		150	8.45	33.09	4.92		25.73	229.8	0.412	
256	7.02	33.91	3.74		200	7.58	33.77	4.21		26.39	167.7	0.511	
343	6.16	33.98	2.85		250	7.07	33.90	3.82		26.56	151.8	0.590	
514	4.99	34.13	1.02		300	6.58	33.95	3.33		26.67	142.2	0.664	
672p	4.68	34.29	0.41		400	5.63	34.03	2.15		26.85	125.6	0.798	
1137	3.30	34.45	0.69		500	5.03	34.12	1.14		27.00	112.6	0.917	
					600	4.80	34.22	0.55		27.10	103.5	1.025	
					700	4.57	34.31	0.40		27.20	95.1	1.125	
					800	4.23	34.37	0.39		27.28	87.5	1.216	
					1000	3.62	34.44	0.53		27.40	77.2	1.380	
HORIZON; May 8, 1949; 1833 GCT; 39°47'N, 130°45'W; sounding, missing; wind, 275°, force 4; weather, overcast; sea, high; wire angle, 30°.													408
0	12.47	32.86	5.85		0	12.47	32.86	5.85		24.86	310.2	0.000	
8	12.65	32.84	5.89		10	12.65	32.83	5.89		24.80	316.0	0.031	
21	12.66	32.81	5.89		20	12.65	32.81	5.90		24.79	317.5	0.063	
42	12.25	32.94	5.89		30	12.40	32.84	5.90		24.86	311.2	0.094	
62	11.66	33.05	5.85		50	12.08	33.00	5.89		25.04	293.8	0.156	
83	11.27	33.08	5.73		75	11.42	33.07	5.76		25.22	277.7	0.226	
120	10.27	33.15	5.36		100	10.83	33.11	5.62		25.36	265.0	0.294	
157	8.62	33.49	4.42		150	8.77	33.41	4.60		25.93	210.8	0.414	
233	7.60	33.89	3.76		200	8.03	33.76	3.96		26.32	174.8	0.510	
312	6.65	33.95	3.15		250	7.41	33.91	3.64		26.52	155.7	0.592	
476	5.16	34.00	1.60		300	6.78	33.95	3.25		26.65	144.8	0.668	
742	4.19	34.34	0.49		400	5.69	33.99	2.28		26.82	129.2	0.805	
1155	3.10	34.49	0.70		500	5.06	34.02	1.40		26.92	120.3	0.929	
					600	4.68	34.15	0.82		27.06	107.3	1.043	
					700	4.34	34.29	0.55		27.21	93.9	1.144	
					800	4.02	34.38	0.47		27.31	84.5	1.233	
					1000	3.45	34.44	0.56		27.42	75.2	1.392	

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4905

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

409 HORIZON; May 9, 1949; 0045 GCT; 39°37'N, 131°36'W; sounding, missing; wind, 315°, force 4; weather, overcast; sea, high; wire angle, 33°.

0	13.24	33.01	5.81	0	13.24	33.01	5.81	24.82	313.8	0.000
8	13.40	33.03	6.06	10	13.41	33.03	6.05	24.81	315.7	0.032
20	13.37	33.03	5.32	20	13.37	33.03	5.32	24.82	314.8	0.063
40	12.95	33.01	5.73	30	13.27	33.02	5.37	24.83	313.8	0.094
60	11.83	33.08	5.81	50	12.72	33.04	5.81	24.95	302.6	0.156
80	11.74	33.12	5.64	75	11.75	33.11	5.68	25.19	280.5	0.229
152	8.94	33.42	4.67	100	11.56	33.20	5.55	25.29	271.0	0.298
228	7.62	33.84	3.68	150	9.20	33.42	4.68	25.87	216.8	0.420
309	6.66	33.80	3.02	200	8.01	33.76	3.90	26.32	174.5	0.518
475	5.36	34.05	1.14	250	7.35	33.83	3.56	26.47	160.8	0.601
562p	4.65	34.25	0.41	300	6.78	33.80	3.14	26.53	155.9	0.681
1015	3.74	34.34	0.33	400	5.77	33.94	1.69	26.77	134.2	0.825
				500	5.18	34.10	0.89	26.96	116.0	0.950
				600	4.48	34.23	0.35	27.15	99.1	1.059
				700	4.19	34.32	0.30	27.25	89.9	1.152
				800	3.99	34.34	0.30	27.28	87.1	1.242
				1000	3.76	34.34	0.32	27.31	86.1	1.415

410 HORIZON; May 9, 1949; 0705 GCT; 39°28'N, 132°28'W; sounding, missing; wind, 275°, force 2; weather, overcast; sea, very rough; wire angle, 13°.

0	12.90	32.97	5.74	0	12.90	32.97	5.74	24.86	310.0	0.000
9	13.07	33.03	5.66	10	13.07	33.03	5.65	24.88	309.0	0.031
23	12.62	32.92	5.66	20	12.80	32.93	5.65	24.85	311.5	0.062
48	12.04	32.94	5.74	30	12.18	32.92	5.68	24.96	301.2	0.093
72	11.10	32.99	5.82	50	12.06	32.95	5.74	25.01	297.1	0.152
96	10.88	32.97	5.58	75	11.05	32.99	5.80	25.22	277.3	0.224
145	9.23	33.40	4.86	100	10.85	32.97	5.57	25.24	275.7	0.293
194	7.81	33.75	3.76	150	8.97	33.44	4.78	25.92	211.7	0.416
292	6.78	33.96	3.48	200	7.77	33.77	3.75	26.36	170.2	0.511
389	5.63	34.02	-	250	7.23	33.90	3.70	26.54	153.9	0.591
485	4.64	34.13	1.09	300	6.68	33.97	3.27	26.67	142.0	0.666
878	3.74	34.34	0.40	400	5.47	34.03	1.66	26.87	123.7	0.799
1171	3.09	34.47	0.57	500	4.58	34.14	1.03	27.06	105.8	0.913
				600	4.32	34.21	0.69	27.15	98.8	1.016
				700	4.14	34.26	0.46	27.21	93.7	1.112
				800	3.94	34.30	0.39	27.26	89.6	1.203
				1000	3.41	34.39	0.45	27.38	78.5	1.371

501 CREST; May 14, 1949; 0740 GCT; 38°50'N, 124°09'W; sounding, missing; wind, variable, force 1; weather, drizzle; sea, moderate; wire angle, 3°.

0	11.70	33.43	6.39	1.62	0	11.70	33.43	6.39	1.62	25.45	254.5	0.000
10	10.97	33.45	6.31	1.35	10	10.97	33.45	6.31	1.35	25.60	240.2	0.025
25	10.64	33.57	6.06	1.50	20	10.75	33.54	6.51	1.41	25.70	230.6	0.048
49	9.40	33.68	5.50	1.83	30	10.53	33.60	6.54	1.55	25.79	222.6	0.071
74	8.92	33.75	3.64	2.17	50	9.38	33.68	5.50	1.87	26.05	198.5	0.113
99	8.46	33.84	2.96	2.34	75	8.90	33.76	3.46	2.17	26.18	185.8	0.161
148	7.81	33.93	2.10	2.54	100	8.45	33.84	2.89	2.33	26.32	173.4	0.206
198	7.25	-	-	-	150	7.78	33.93	2.08	2.55	26.49	157.9	0.288
296	6.55	34.02	1.46	2.87	200	7.25	33.97	1.83	2.68	26.60	148.2	0.367
395	5.52	34.07	1.08	3.12	250	6.87	33.99	1.65	2.78	26.66	142.5	0.438
594	4.64	34.18	0.45	3.37	300	6.51	34.02	1.44	2.88	26.74	136.1	0.508
891	3.89	34.36	0.36	3.54	400	5.49	34.07	1.07	3.14	26.90	120.8	0.636
1189	3.28	34.49	0.68	3.44	500	4.98	34.13	0.69	3.28	27.01	111.2	0.752
					600	4.63	34.18	0.46	3.38	27.09	104.6	0.860
					700	4.36	34.24	0.37	3.46	27.17	97.7	0.961
					800	4.11	34.31	0.38	3.52	27.25	90.5	1.056
					1000	3.64	34.41	0.45	3.54	27.38	79.7	1.227

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

CREST; May 14, 1949; 0206 GCT; 38°43'N, 124°54'W; sounding, missing; wind, 360°, force 2; weather, overcast; sea, rough; wire angle, 0°. 502

0	13.56	32.88	6.19	0.86	0	13.56	32.88	6.19	0.86	24.66	329.3	0.000
10	12.89	32.95	6.31	0.71	10	12.89	32.95	6.31	0.71	24.85	311.9	0.032
25	13.53	32.99	6.36	0.70	20	12.65	32.98	6.38	0.70	24.92	305.1	0.063
50	10.90	32.92	6.47	0.76	30	12.22	32.98	6.39	0.71	25.00	297.4	0.093
75	10.99	33.15	6.40	0.95	50	10.90	32.92	6.47	0.76	25.20	279.4	0.151
100	10.32	33.35	5.90	1.25	75	10.99	33.15	6.40	0.95	25.36	264.4	0.219
150	8.32	33.68	4.06	1.90	100	10.32	33.35	5.90	1.25	25.63	238.8	0.282
200	7.89	33.87	2.97	2.28	150	8.32	33.68	4.06	1.90	26.21	184.4	0.388
300	7.20	34.04	1.71	2.82	200	7.89	33.87	2.97	2.28	26.43	164.6	0.474
400	6.12	34.05	1.16	3.12	250	7.53	33.99	2.22	2.58	26.57	151.6	0.554
600	5.12	34.27	0.39	3.49	300	7.20	34.04	1.71	2.82	26.66	143.7	0.627
900	3.99	34.35	0.37	-	400	6.12	34.05	1.16	3.12	26.81	130.4	0.765
1200	3.35	34.45	0.76	3.15	500	5.57	34.18	0.76	3.34	26.98	115.0	0.887
					600	5.12	34.27	0.39	3.49	27.11	103.8	0.997
					700	4.69	34.30	0.27	3.51	27.18	97.0	1.097
					800	4.33	34.32	0.27	3.48	27.23	92.5	1.192
					1000	3.69	34.38	0.50	3.35	27.35	82.3	1.367

CREST; May 13, 1949; 1957 GCT; 38°35'N, 125°42'W; sounding, missing; wind, 020°, force 1; weather, distant lightning; sea, very rough; wire angle, 0°. 503

0	13.3	32.77	6.21	1.05	0	13.3	32.77	6.21	1.05	24.63	332.3	0.000
10	13.23	32.97	6.24	0.58	10	13.23	32.97	6.24	0.58	24.80	316.7	0.032
25	13.02	32.94	6.30	0.57	20	13.08	32.94	6.29	0.56	24.80	316.1	0.064
50	10.28	33.12	5.96	0.94	30	12.90	32.97	6.28	0.58	24.86	310.6	0.095
75	9.28	33.31	5.19	1.41	50	10.28	33.12	5.96	0.94	25.46	254.6	0.152
100	8.64	33.51	4.11	1.78	75	9.28	33.31	5.19	1.41	25.77	225.1	0.212
150	8.30	34.11r	3.04	2.16	100	8.64	33.51	4.11	1.78	26.03	200.9	0.265
200	7.22	33.96	2.80	2.36	150	8.30	33.86	3.04	2.16	26.36	170.4	0.360
300	6.34	34.02	1.86	2.78	200	7.22	33.96	2.80	2.36	26.59	148.6	0.437
400	5.79	34.11	0.95	3.02	250	6.65	33.98	2.38	2.59	26.69	140.2	0.510
600	4.78	34.22	0.48	3.32	300	6.34	34.02	1.86	2.78	26.76	133.9	0.578
900	3.77	34.33	0.36	3.37	400	5.79	34.11	0.95	3.02	26.90	121.6	0.706
1200	3.24	34.48	0.74	3.34	500	5.24	34.17	0.58	3.19	27.01	111.5	0.822
					600	4.78	34.22	0.48	3.32	27.11	103.2	0.930
					700	4.38	34.26	0.40	3.36	27.18	96.4	1.030
					800	4.06	34.29	0.35	3.37	27.24	91.5	1.124
					1000	3.52	34.37	0.46	3.37	27.36	81.1	1.297

CREST; May 13, 1949; 1347 GCT; 38°18'N, 126°30'W; sounding, missing; wind, 360°, force 3; weather, overcast; sea, rough; wire angle, 0°. 504

0	13.03	32.77	6.17	0.74	0	13.03	32.77	6.17	0.74	24.68	327.5	0.000
10	13.01	32.77	6.20	0.67	10	13.01	32.77	6.20	0.67	24.69	327.2	0.033
25	12.91	32.76	6.13	0.69	20	12.94	32.76	6.16	0.68	24.69	326.8	0.065
50	11.68	33.13	6.54	0.84	30	12.81	32.79	6.14	0.72	24.74	322.3	0.098
75	10.65	33.17	6.20	0.94	50	11.68	33.13	6.54	0.84	25.22	277.2	0.158
100	9.95	33.17	5.84	0.85	75	10.65	33.17	6.20	0.94	25.43	257.4	0.225
150	8.30	33.49	4.14	1.93	100	9.95	33.17	5.84	0.85	25.56	246.0	0.288
200	7.75	33.89	3.03	2.29	150	8.30	33.49	4.14	1.93	26.06	198.6	0.399
300	6.60	33.98	2.11	2.79	200	7.75	33.89	3.03	2.29	26.46	161.2	0.489
399	5.70	-	1.18	-	250	7.14	33.94	2.53	2.59	26.59	149.8	0.566
598	4.60	34.20	0.49	3.42	300	6.60	33.98	2.11	2.79	26.69	140.3	0.639
897	3.74	34.33	0.38	3.51	400	5.70	34.08	1.16	3.08	26.88	123.0	0.771
1196	3.08	34.45	0.72	3.29	500	5.03	34.14	0.74	3.27	27.01	111.2	0.888
					600	4.60	34.20	0.48	3.42	27.11	102.7	0.995
					700	4.28	34.25	0.38	3.50	27.18	96.1	1.094
					800	3.99	34.29	0.36	3.52	27.25	90.6	1.187
					1000	3.48	34.37	0.46	3.46	27.36	80.6	1.358

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
505	CREST; May 13, 1949; 0732 GCT; 38°06'N, 127°20'W; sounding, missing; wind, 360°, force 2; weather, overcast; sea, rough; wire angle, 23°.											
0	13.73	32.86	6.02	0.90	0	13.73	32.86	6.02	0.90	24.61	334.2	0.000
9	13.75	32.84	5.99	0.58	10	13.75	32.84	6.00	0.58	24.59	336.1	0.034
23	13.77	32.84	6.08	0.60	20	13.76	32.84	6.06	0.60	24.59	336.4	0.067
45	11.77	32.83	6.40	0.60	30	13.75	32.84	6.19	0.60	24.59	336.7	0.101
66	11.04	32.81	6.25	0.69	50	11.55	32.83	6.41	0.61	25.01	297.0	0.164
88	10.28	32.75	6.13	0.80	75	10.73	32.79	6.22	0.73	25.12	286.6	0.237
132	9.12	33.24	5.05	1.57	100	9.95	32.84	5.98	0.92	25.30	270.6	0.307
176	8.12	33.71	3.41	2.26	150	8.66	33.43	4.09	2.00	25.96	207.8	0.427
264	7.15	33.96	2.51	2.62	200	7.84	33.85	3.14	2.38	26.42	165.5	0.520
353	6.22	33.98	1.72	2.96	250	7.29	33.94	2.64	2.57	26.57	151.6	0.599
530	5.12	34.15	0.61	3.45	300	6.77	33.97	2.18	2.76	26.66	143.4	0.673
804	4.07	34.36	0.33	3.65	400	5.85	34.01	1.36	3.11	26.81	129.8	0.810
1100	3.34	34.45	0.59	3.55	500	5.28	34.12	0.76	3.38	26.97	115.7	0.932
					600	4.83	34.21	0.45	3.54	27.09	104.7	1.043
					700	4.43	34.29	0.34	3.62	27.20	94.7	1.142
					800	4.08	34.36	0.33	3.64	27.29	86.5	1.233
					1000	3.55	34.43	0.47	3.61	27.40	77.0	1.396
506	CREST; May 13, 1949; 0054 GCT; 37°56'N, 128°06'W; sounding, missing; wind, 360°, force 4; weather, overcast; sea, rough; wire angle, 20°.											
0	13.71	32.81	6.05	0.51	0	13.71	32.81	6.06	0.51	24.57	337.7	0.000
10	13.58	32.81	6.13	0.49	10	13.58	32.81	6.13	0.48	24.60	335.4	0.034
24	13.58	32.83	6.17	0.46	20	13.58	32.83	6.16	0.46	24.62	333.9	0.067
48	11.02	32.77	6.60	0.53	30	13.56	32.81	6.26	0.46	24.61	335.0	0.101
73	10.50	32.74	6.44	0.64	50	10.95	32.77	6.59	0.53	25.07	291.2	0.163
97	9.58	32.72	6.45	0.78	75	10.45	32.74	6.49	0.65	25.13	285.7	0.235
146	8.98	-	5.19	1.45	100	9.55	32.72	6.45	0.80	25.27	273.1	0.305
196	8.18	33.66	3.51	2.05	150	8.90	33.30	5.03	1.51	25.82	221.1	0.429
294	7.27	34.04	1.92	2.36	200	8.14	33.68	3.42	2.06	26.24	182.5	0.530
393	6.12	34.02	1.31	2.93	250	7.72	33.93	2.45	2.24	26.50	158.8	0.615
590	4.84	34.29	0.52	3.32	300	7.19	34.04	1.89	2.38	26.66	143.7	0.691
886	3.64	34.38	0.36	3.40	400	6.06	34.04	1.31	2.94	26.81	130.2	0.827
1231	2.93	34.34	0.79	3.53	500	5.35	34.19	0.84	3.19	27.01	111.4	0.948
					600	4.79	34.30	0.50	3.32	27.17	97.6	1.053
					700	4.35	34.35	0.36	3.38	27.26	89.4	1.146
					800	3.94	34.37	0.33	3.39	27.31	84.4	1.233
					1000	3.30	34.38	0.50	3.44	27.39	77.9	1.395
507	CREST; May 12, 1949; 1806 GCT; 37°44'N, 128°57'W; sounding, missing; wind, 360°, force 4; weather, drizzle; sea, rough; wire angle, 34°.											
0	13.81	32.79	5.75	1.13	0	13.81	32.79	5.75	1.13	24.54	340.7	0.000
8	13.46	32.75	6.24	0.57	10	13.43	32.75	6.26	0.58	24.59	336.6	0.034
21	12.86	32.74	6.45	0.60	20	13.02	32.74	6.44	0.60	24.66	329.8	0.067
45	10.43	32.84	6.52	0.65	30	11.51	32.74	6.49	0.61	24.95	302.7	0.099
68	9.60	32.79	6.41	0.75	50	10.24	32.84	6.53	0.66	25.25	274.4	0.157
93	8.92	32.81	6.10	1.01	75	9.39	32.79	6.35	0.81	25.35	265.0	0.224
141	9.30r	33.58	3.95	2.00	100	8.75	32.83	5.82	1.09	25.49	252.5	0.289
189	7.78	33.84	3.16	2.18	150	8.22	33.70	3.77	2.05	26.24	181.3	0.397
285	6.60	33.91	2.95	2.31	200	7.58	33.85	3.13	2.19	26.45	161.8	0.483
382	5.94	34.02	1.57	2.83	250	6.88	33.87	3.02	2.27	26.57	151.6	0.562
576	4.85	34.13	0.67	3.24	300	6.50	33.92	2.86	2.36	26.66	143.4	0.635
866	3.74	34.31	0.36	3.28	400	5.84	34.04	1.39	2.91	26.84	127.4	0.770
1265	2.93	34.45	0.78	3.19	500	5.24	34.10	0.88	3.15	26.96	116.7	0.892
					600	4.74	34.14	0.62	3.25	27.05	108.8	1.005
					700	4.32	34.22	0.44	3.27	27.16	98.7	1.109
					800	3.93	34.28	0.36	3.28	27.24	90.7	1.204
					1000	3.41	34.37	0.44	3.27	27.37	79.8	1.374

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OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	
CREST; May 12, 1949; 1050 GCT; 37°32'N, 129°48'W; sounding, missing; wind, 045°, force 5; weather, overcast; sea, rough; wire angle, 40°.													508
0	14.83	33.03	5.61	0.54	0	14.83	33.03	5.61	0.54	24.51	343.6	0.000	
7	14.60	32.95	5.85	0.49	10	14.60	32.93	5.86	0.48	24.48	346.3	0.034	
19	14.58	32.88	5.90	0.50	20	14.59	32.88	5.95	0.50	24.45	350.0	0.069	
39	12.14	32.83	6.56	0.50	30	14.45	32.85	6.18	0.50	24.45	349.7	0.104	
58	11.40	32.84	6.34	0.54	50	11.63	32.83	6.51	0.51	25.00	298.4	0.169	
78	10.96	32.95	6.04	0.64	75	11.03	32.92	6.18	0.62	25.17	281.9	0.242	
117	9.30	33.30	5.58	1.15	100	10.27	33.16	5.83	0.89	25.49	252.1	0.308	
156	8.52	33.55	4.18	1.75	150	8.58	33.52	4.36	1.67	26.05	200.0	0.422	
235	7.57	33.87	3.11	2.18	200	7.98	33.76	3.53	2.02	26.33	174.1	0.515	
314	6.70	33.91	2.24	2.48	250	7.41	33.88	2.92	2.25	26.50	158.0	0.598	
474	5.08	33.98	1.30	2.90	300	6.86	33.91	2.38	2.44	26.60	149.0	0.675	
728	4.23	34.27	0.39	3.24	400	5.77	33.93	1.68	2.74	26.76	134.7	0.816	
1007	3.47	34.42	0.48	3.15	500	4.97	34.00	1.19	2.95	26.91	120.8	0.944	
					600	4.62	34.12	0.76	3.12	27.04	108.9	1.060	
					700	4.32	34.24	0.44	3.22	27.17	97.3	1.162	
					800	4.02	34.32	0.36	3.24	27.27	88.9	1.256	
					1000	3.48	34.42	0.47	3.16	27.40	76.9	1.421	
CREST; May 12, 1949; 0350 GCT; 37°19'N, 130°36'W; sounding, missing; wind, 360°, force 3; weather, overcast; sea, moderate; wire angle, 5°.													509
0	15.20	32.94	5.94	0.38	0	15.20	32.94	5.94	0.38	24.36	357.9	0.000	
10	15.08[a]	32.90	5.94	0.44	10	15.08	32.90	5.94	0.44	24.36	358.3	0.036	
25	14.43	32.88	5.98	0.43	20	14.92	32.88	5.97	0.43	24.38	356.8	0.071	
50	12.46	32.90	6.32	0.49	30	14.03	32.88	6.02	0.43	24.56	339.2	0.106	
75	11.10	32.88	6.31	0.53	50	12.46	32.90	6.32	0.49	24.89	308.0	0.171	
100	9.66	33.06	6.29	1.07	75	11.10	32.88	6.31	0.53	25.13	286.3	0.245	
149	8.21	-	3.80	-	100	9.66	33.06	6.29	1.07	25.51	249.8	0.312	
198	7.64	33.87	3.06	2.20	150	8.22	33.70	3.77	1.80	26.24	181.4	0.420	
298	6.62	34.02	1.93	2.66	200	7.65	33.88	3.03	2.20	26.47	160.6	0.506	
397	5.73	34.11	1.07	3.02	250	7.12	33.96	2.41	2.46	26.61	148.0	0.582	
596	4.45	34.23	0.60	3.26	300	6.60	34.02	1.88	2.67	26.72	137.4	0.654	
894	3.75	34.54r	0.41	3.40	400	5.70	34.11	1.07	3.02	26.91	120.6	0.783	
1192	3.10	34.54r	0.67	3.27	500	4.98	34.18	0.78	3.17	27.05	107.5	0.897	
					600	4.45	(34.23)	0.61	3.26	(27.15)	(98.8)	(1.000)	
					700	4.18	(34.28)	0.48	3.33	(27.22)	(92.7)	(1.096)	
					800	3.97	(34.33)	0.42	3.37	(27.28)	(87.5)	(1.186)	
					1000	3.52	(34.42)	0.48	3.38	(27.40)	(77.4)	(1.351)	
CREST; May 11, 1949; 2202 GCT; 37°06'N, 131°20'W; sounding, missing; wind, 360°, force 3; weather, cloudy; sea, rough; wire angle, 0°.													510
0	15.33	33.00	5.88	0.64	0	15.33	33.00	5.88	0.64	24.38	356.4	0.000	
10	13.79	32.84	6.06	0.56	10	13.79	32.84	6.06	0.56	24.58	337.0	0.035	
25	13.27	32.81	6.18	0.57	20	13.42	32.82	6.16	0.56	24.64	331.6	0.068	
50	11.36	32.79	6.71	0.60	30	12.86	32.81	6.27	0.58	24.75	321.6	0.101	
75	10.64	32.77	6.18	-	50	11.36	32.79	6.71	0.60	25.01	296.5	0.163	
100	9.55	32.95	5.77	0.99	75	10.64	32.77	6.18	0.74	25.12	286.6	0.236	
149	8.54	33.55	4.48	1.82	100	9.55	32.95	5.77	0.99	25.45	256.0	0.303	
199	7.80	33.84	3.21	2.25	150	8.55	33.55	4.42	1.84	26.07	197.4	0.417	
298	6.56	33.91	2.26	2.73	200	7.78	33.84	3.18	2.25	26.42	165.5	0.507	
397	5.70	33.98	1.18	3.16	250	7.08	33.88	2.67	2.50	26.55	153.4	0.587	
595	4.33	34.13	0.68	3.30	300	6.52	33.91	2.23	2.73	26.65	144.4	0.662	
892	3.50	34.38	0.38	3.42	400	5.67	33.98	1.17	3.16	26.81	129.9	0.799	
1190	3.06	34.45	0.72	3.42	500	4.92	34.06	0.84	3.26	26.96	115.9	0.922	
					600	4.31	34.14	0.68	3.30	27.09	103.9	1.032	
					700	3.96	34.25	0.56	3.35	27.22	92.4	1.130	
					800	3.69	34.33	0.46	3.39	27.31	84.4	1.218	
					1000	3.32	34.42	0.46	3.44	27.42	75.1	1.377	

a) Middle thermometer reading of 14.39° rejected.

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
601	CREST; May 8, 1949; 1908 GCT; 37°14'N, 123°17'W; sounding, missing; wind, 290°, force 3; weather, partly cloudy; sea, slight; wire angle, missing.											
0	12.85	33.01	6.25	0.84	0	12.85	33.01	6.25	0.84	24.90	306.2	0.000
10	12.38	33.04	6.29	0.63	10	12.38	33.04	6.29	0.63	25.02	294.9	0.030
25	11.45	33.04	6.45	0.67	20	11.74	33.04	6.41	0.63	25.14	284.3	0.059
50	9.86	33.49	5.66	1.47	30	11.08	33.04	6.39	0.78	25.26	273.1	0.087
75	9.64	33.64	5.14	1.58	50	9.86	33.49	5.66	1.47	25.82	219.4	0.136
99	9.36	33.73	4.80	1.77	75	9.64	33.64	5.14	1.58	25.97	206.3	0.189
149	8.68	33.86	3.29	2.16	100	9.34	33.73	4.73	1.79	26.09	195.2	0.240
198	7.86	33.95	2.71	2.28	150	8.68	33.87	3.26	2.17	26.30	175.5	0.332
297	6.92	34.02	1.64	2.66	200	7.83	33.95	2.67	2.29	26.50	157.7	0.416
396	6.54	34.20	0.91	3.03	250	7.32	33.97	2.13	2.46	26.59	150.1	0.492
594	5.14	34.20	0.42	3.22	300	6.88	34.03	1.63	2.67	26.69	140.2	0.565
892	4.03	34.40	0.43	3.34	400	6.50	34.20	0.89	3.04	26.88	124.0	0.697
1190	3.24	34.51	0.86	3.28	500	5.76	34.20	0.56	3.15	26.97	115.6	0.817
					600	5.14	34.20	0.38	3.23	27.05	109.3	0.929
					700	4.69	34.26	0.31	3.30	27.15	100.3	1.034
					800	4.33	34.35	0.33	3.34	27.26	90.3	1.129
					1000	3.74	34.45	0.60	3.33	27.40	77.8	1.298
602	CREST; May 9, 1949; 0751 GCT; 36°55'N, 123°54'W; sounding, missing; wind, 315°, force 5; weather, partly cloudy; sea, rough; wire angle, 40°.											
0	13.16	33.03	6.00	0.60	0	13.16	33.03	6.00	0.60	24.84	312.2	0.000
8	13.08	32.88	6.10	0.54	10	13.09	32.86	6.08	0.54	24.74	321.8	0.032
19	13.03	32.86	6.22	0.55	20	13.03	32.84	6.23	0.55	24.74	322.0	0.064
39	11.58	-	6.49	0.48	30	12.78	32.85	6.42	0.52	24.79	317.1	0.096
58	10.58	33.06	6.20	0.78	50	10.82	32.96	6.34	0.56	25.24	274.8	0.155
78	9.54	33.06	5.91	0.93	75	9.65	33.04	5.94	0.90	25.50	250.7	0.221
117	8.93	33.69	3.86	1.79	100	9.15	33.32	4.40	1.58	25.80	222.7	0.280
156	8.32	33.91	2.81	2.09	150	8.40	33.90	2.93	2.05	26.37	169.2	0.378
235	7.54	34.00	2.02	2.36	200	7.88	33.96	2.22	2.25	26.50	157.8	0.459
314	6.56	34.04	1.70	2.57	250	7.31	34.01	1.98	2.41	26.62	147.1	0.536
472	5.71	34.16	0.66	3.01	300	6.67	34.04	1.81	2.53	26.73	136.7	0.607
727	4.21	34.29	0.33	3.14	400	6.04	34.12	1.09	2.84	26.87	124.3	0.737
1017	3.62	34.54r	0.68	3.09	500	5.48	34.17	0.56	3.05	26.98	114.4	0.856
					600	4.74	34.22	0.36	3.12	27.11	102.8	0.965
					700	4.31	34.28	0.32	3.14	27.20	94.2	1.063
					800	4.02	(34.34)	0.38	3.14	(27.28)	(87.5)	(1.154)
					1000	3.65	(34.44)	0.66	3.10	(27.40)	(76.4)	(1.319)
603	CREST; May 9, 1949; 1434 GCT; 36°47'N, 124°42'W; sounding, missing; wind, 315°, force 4; weather, overcast; sea, rough; wire angle, 17°.											
0	13.80	33.08	5.99	0.69	0	13.80	33.08	5.99	0.69	24.75	320.6	0.000
10	13.68	33.10	6.16	0.48	10	13.68	33.10	6.16	0.48	24.79	317.2	0.032
24	13.50	33.10	6.34	0.45	20	13.56	33.10	6.29	0.45	24.82	314.8	0.063
42	10.96	32.97	6.51	0.69	30	13.25	33.07	6.41	0.51	24.87	310.1	0.095
71	10.56	33.30	5.70	1.07	50	10.85	33.04	6.50	0.79	25.30	269.5	0.153
94	9.40	33.48	4.33	1.64	75	10.49	33.33	5.54	1.13	25.59	242.7	0.217
140	8.58	33.84	2.95	2.15	100	9.20	33.52	4.00	1.74	25.95	208.6	0.273
185	8.10	33.95	2.56	2.16	150	8.49	33.87	2.83	2.16	26.33	172.5	0.368
276	6.94	34.04	1.92	2.41	200	7.90	33.97	2.50	2.17	26.50	157.4	0.451
368	6.04	34.07	1.14	2.84	250	7.25	34.02	2.17	2.31	26.64	145.3	0.527
555	5.31	34.29	0.34	3.40	300	6.68	34.05	1.66	2.52	26.74	136.2	0.597
847	4.07	34.42	0.38	3.14r	400	5.85	34.10	0.93	3.02	26.88	123.3	0.726
1144	3.35	34.54	0.63	3.10	500	5.48	34.24	0.49	3.32	27.04	109.1	0.843
					600	5.12	34.31	0.28	3.44	27.14	100.8	0.948
					700	4.58	34.36	0.25	3.47	27.24	91.3	1.044
					800	4.21	34.40	0.32	3.44	27.31	85.0	1.132
					1000	3.68	34.48	0.54	3.28	27.42	75.0	1.292

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

CREST; May 9, 1949; 2107 GCT; 36°45'N, 125°28'W; sounding, missing; wind, 315°, force 4; weather, cloudy; sea, rough; wire angle, 17°. 604

0	13.43	33.10	6.08	0.54	0	13.43	33.10	6.08	0.54	24.86	310.4	0.000
10	13.42	33.03	5.97	0.44	10	13.42	33.03	5.97	0.44	24.81	315.6	0.031
24	13.17	33.03	6.26	0.47	20	13.33	33.03	6.19	0.45	24.82	314.3	0.063
47	11.49	33.01	6.50	0.66	30	12.85	33.03	6.38	0.51	24.92	305.4	0.094
71	9.67	33.15	5.26	1.17	50	11.25	33.01	6.47	0.73	25.20	278.6	0.152
94	9.14	33.39	4.82	1.58	75	9.57	33.19	5.18	1.28	25.63	238.3	0.217
139	8.46	-	3.04	-	100	9.05	33.44	4.68	1.64	25.91	212.1	0.273
185	8.18	33.93	2.49	2.33	150	8.38	33.76	2.87	2.14	26.26	179.3	0.371
278	7.16	34.07	1.78	2.64	200	8.04	33.97	2.38	2.38	26.48	159.5	0.455
371	6.44	34.07	1.14	3.00	250	7.44	34.06	2.01	2.54	26.65	145.0	0.532
556	5.32	34.29	0.41	3.35	300	6.98	34.07	1.62	2.74	26.71	138.7	0.602
840	4.09	34.49r	0.44	3.33	400	6.25	34.09	0.98	3.09	26.82	129.2	0.736
1134	3.35	34.49	0.77	3.37	500	5.64	34.22	0.54	3.30	27.00	112.7	0.857
					600	5.08	34.34	0.38	3.36	27.16	98.2	0.963
					700	4.62	34.43	0.35	3.36	27.29	86.7	1.055
					800	4.22	34.42	0.40	3.33	27.33	83.6	1.140
					1000	3.65	34.47	0.59	3.34	27.42	75.3	1.300

CREST; May 10, 1949; 0415 GCT; 36°25'N, 126°24'W; sounding, missing; wind, 315°, force 2; weather, overcast; sea, moderate; wire angle, 12°. 605

0	13.80	33.06	6.07	0.99	0	13.80	33.06	6.07	0.99	24.75	320.9	0.000
10	13.72	32.95	6.08	0.56	10	13.72	32.95	6.08	0.56	24.68	327.6	0.032
25	13.33	32.95	6.21	0.59	20	13.58	32.95	6.16	0.58	24.71	325.0	0.065
49	10.46	32.81	6.47	0.64	30	12.70	32.94	6.30	0.60	24.88	308.5	0.097
73	10.33	33.13	6.04	0.94	50	10.45	32.81	6.47	0.65	25.19	279.7	0.156
97	9.74	33.42	5.13	1.42	75	10.31	33.14	6.00	0.99	25.47	253.8	0.222
144	8.40	33.82	3.18	2.05	100	9.65	33.45	5.00	1.48	25.81	220.5	0.282
193	7.82	34.00	2.65	2.24	150	8.34	33.86	3.06	2.10	26.35	171.1	0.380
289	6.68	33.96	1.95	2.58	200	7.75	34.01	2.57	2.28	26.56	152.2	0.460
386	5.54	34.02	1.42	2.73	250	7.17	33.98	2.21	2.46	26.62	147.2	0.535
578	4.78	34.16	0.44	3.19	300	6.46	33.97	1.89	2.60	26.70	139.3	0.607
868	3.91	34.36	0.41	3.30	400	5.49	34.03	1.28	2.77	26.87	124.0	0.738
1162	3.30	34.43	0.77	3.13	500	5.09	34.10	0.74	3.03	26.97	115.0	0.858
					600	4.71	34.18	0.42	3.22	27.08	105.4	0.968
					700	4.38	34.27	0.35	3.28	27.19	95.9	1.069
					800	4.09	34.33	0.39	3.31	27.27	89.0	1.161
					1000	3.61	34.40	0.57	3.25	27.37	80.0	1.330

CREST; May 10, 1949; 1105 GCT; 36°08'N, 127°14'W; sounding, missing; wind, 315°, force 3; weather, overcast; sea, moderate; wire angle, 20°. 606

0	13.80	32.94	5.75	0.62	0	13.80	32.94	5.75	0.62	24.66	329.4	0.000
9	13.83	32.82	5.95	0.53	10	13.83	32.82	5.98	0.53	24.56	338.2	0.033
23	13.94	33.05	6.19	0.47	20	13.95	33.02	6.16	0.47	24.69	327.1	0.067
46	12.40	33.15	6.23	0.40	30	13.89	33.10	6.21	0.44	24.76	320.4	0.099
68	12.08	33.12	6.11	0.42	50	12.27	33.15	6.21	0.40	25.12	286.2	0.160
91	10.87	33.06	5.91	0.77	75	11.96	33.11	6.06	0.49	25.15	284.2	0.231
134	9.00	33.39	4.66	1.41	100	10.04	33.06	5.76	0.90	25.45	255.9	0.299
178	8.08	33.71	3.67	1.92	150	8.61	33.54	4.13	1.60	26.06	198.9	0.413
266	6.90	33.95	3.16	2.14	200	7.73	33.80	3.58	1.98	26.39	167.6	0.504
356	6.06	34.00	1.73	2.68	250	7.09	33.92	3.34	2.10	26.58	150.7	0.583
536	6.56	34.11	0.68	3.15	300	6.56	33.98	2.50	2.36	26.70	139.5	0.657
820	4.01	34.31	0.36	3.27	400	5.74	34.02	1.26	2.83	26.83	127.8	0.790
1110	3.31	34.47	0.65	3.25	500	5.17	34.08	0.73	3.07	26.95	117.2	0.913
					600	4.70	34.15	0.50	3.19	27.06	107.6	1.025
					700	4.36	34.22	0.40	3.24	27.15	99.3	1.128
					800	4.06	34.30	0.37	3.27	27.25	90.8	1.223
					1000	3.55	34.41	0.49	3.27	27.38	78.6	1.393

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
607	CREST; May 10, 1949; 1725 GCT; 35°52'N, 128°00'W; sounding, missing; wind, 315°, force, missing; weather, overcast; sea, moderate; wire angle, 15°.											
0	14.88	33.08	5.97	0.79	0	14.88	33.08	5.97	0.79	24.54	341.0	0.000
10	14.66	33.03	5.91	0.52	10	14.66	33.03	5.91	0.52	24.55	340.0	0.034
24	14.67	33.03	5.94	0.48	20	14.65	33.03	5.94	0.49	24.55	340.4	0.068
48	12.20	-	5.93	0.52	30	14.65	33.03	5.95	0.49	24.55	341.3	0.102
72	11.98	32.97	6.05	0.56	50	12.19	33.01	5.96	0.53	25.03	295.0	0.166
96	11.28	33.01	5.92	0.75	75	11.97	32.97	6.07	0.57	25.04	294.8	0.240
145	9.87	33.35	5.17	1.20	100	11.06	33.05	5.87	0.76	25.27	273.6	0.311
194	8.40	33.64	4.47	1.66	150	9.62	33.38	5.09	1.26	25.77	226.2	0.436
290	7.10	33.92	3.66	2.00	200	8.33	33.67	4.42	1.68	26.20	185.9	0.539
386	5.81	33.95	2.29	2.63	250	7.63	33.86	3.97	1.83	26.45	162.6	0.626
580	4.91	34.22	0.55	3.28	300	6.95	33.93	3.55	2.05	26.60	148.8	0.704
874	3.90	34.40	-	3.37	400	5.68	33.96	2.03	2.70	26.79	131.4	0.843
1170	3.28	34.51	0.74	3.15	500	5.23	34.14	0.94	3.11	26.99	113.6	0.966
					600	4.82	34.23	0.52	3.30	27.11	103.2	1.074
					700	4.43	34.30	0.47	3.38	27.21	93.9	1.173
					800	4.10	34.36	0.49	3.38	27.29	86.8	1.263
					1000	3.60	34.45	0.59	3.30	27.41	76.2	1.427
608	CREST; May 10, 1949; 2242 GCT; 35°41'N, 128°36'W; sounding, missing; wind, 335°, force 3; weather, overcast; sea, moderate; wire angle, 4°.											
0	14.98	33.10	5.87	0.50	0	14.98	33.10	5.87	0.50	24.53	341.3	0.000
10	14.75	33.08	5.98	0.51	10	14.75	33.08	5.98	0.51	24.57	338.3	0.034
25	14.53	33.06	5.99	0.52	20	14.60	33.07	5.99	0.51	24.59	336.3	0.068
50	12.18	33.02	6.48	0.50	30	14.45	33.05	6.05	0.51	24.61	335.0	0.101
75	11.98	32.95	6.18	0.55	50	12.18	33.02	6.48	0.50	25.04	294.3	0.164
100	11.88	33.04	6.02	0.64	75	11.98	32.95	6.18	0.55	25.01	297.4	0.238
150	9.80	33.31	5.08	1.28	100	11.88	33.04	6.02	0.64	25.11	288.6	0.311
200	8.35	33.68	4.13	1.91	150	9.80	33.31	5.08	1.28	25.69	234.3	0.443
299	7.11	33.98	2.94	2.41	200	8.35	33.68	4.13	1.91	26.21	185.5	0.547
398	6.10	33.98	1.66	2.98	250	7.68	33.90	3.53	2.19	26.48	160.2	0.633
597	4.91	34.18	0.55	3.40	300	7.10	33.98	2.91	2.41	26.62	147.1	0.711
896	3.90	34.42	0.41	3.58	400	6.09	33.98	1.64	2.97	26.76	135.3	0.851
1195	3.22	34.51	0.78	3.44	500	5.41	34.07	0.88	3.26	26.91	121.1	0.979
					600	4.90	34.18	0.54	3.40	27.06	107.7	1.094
					700	4.50	34.28	0.40	3.50	27.18	96.5	1.196
					800	4.17	34.36	0.38	3.56	27.28	87.5	1.288
					1000	3.64	34.46	0.49	3.56	27.41	76.0	1.452
609	CREST; May 11, 1949; 0425 GCT; 35°31'N, 129°25'W; sounding, missing; wind, 315°, force 1; weather, cloudless; sea, moderate; wire angle, 0°.											
0	15.10	33.06	5.57	0.64	0	15.10	33.06	5.57	0.64	24.48	346.7	0.000
10	14.92	33.04	5.99	0.47	10	14.92	33.04	5.99	0.47	24.50	344.3	0.035
25	14.76	33.04	5.74	0.48	20	14.80	33.04	5.82	0.47	24.53	342.5	0.069
50	12.74	33.01	4.84r	0.48	30	14.71	33.04	5.76	0.48	24.54	341.2	0.103
75	11.94	33.03	6.09	0.48	50	12.74	33.01	5.95	0.48	24.92	305.3	0.168
100	11.95	33.13	6.05	0.49	75	11.94	33.03	6.09	0.48	25.09	290.0	0.242
150	9.92	33.33	5.04	1.13	100	11.95	33.13	6.05	0.49	25.17	283.2	0.314
199	8.42	33.68	3.78	1.83	150	9.92	33.33	5.04	1.13	25.69	234.4	0.444
298	7.26	33.96	2.24	2.51	200	8.41	33.68	3.76	1.84	26.20	186.4	0.549
396	6.13	33.96	1.59	2.88	250	7.77	33.92	2.85	2.22	26.48	160.0	0.635
594	4.96	34.13	0.60	3.31	300	7.25	33.96	2.23	2.52	26.59	150.6	0.713
891	4.00	34.34	0.33	3.49	400	6.10	33.96	1.57	2.90	26.74	136.8	0.856
1189	3.29	34.43	0.70	3.39	500	5.44	34.02	1.00	3.14	26.87	125.1	0.987
					600	4.94	34.14	0.59	3.32	27.02	111.2	1.105
					700	4.58	34.23	0.40	3.42	27.14	101.2	1.211
					800	4.26	34.29	0.33	3.48	27.22	93.9	1.309
					1000	3.72	34.38	0.43	3.47	27.34	82.8	1.486

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	
CREST; May 11, 1949; 0955 GCT; 35°23'N, 130°09'W; sounding, missing; wind, 315°, force 2; weather, cloudy; sea, rough; wire angle, 5°.													610
0	15.12	33.13	6.03	0.55	0	15.12	33.13	6.03	0.55	24.52	342.3	0.000	
10	14.85	32.95	5.96	0.55	10	14.85	32.95	5.96	0.55	24.45	349.8	0.035	
25	14.62	32.97	6.02	0.54	20	14.69	32.96	6.01	0.55	24.49	345.9	0.069	
50	12.07	32.99	6.40	0.55	30	14.53	32.98	6.11	0.54	24.54	341.9	0.104	
75	12.11	33.02	6.22	0.56	50	12.07	32.99	6.40	0.55	25.03	294.7	0.168	
99	11.62	33.06	6.02	0.69	75	12.11	33.02	6.22	0.56	25.06	293.3	0.241	
148	9.86	33.24	5.29	1.33	100	11.61	33.06	6.01	0.69	25.18	282.2	0.313	
198	8.60	33.78	3.17	2.17	150	9.81	33.30	5.27	1.35	25.68	235.2	0.443	
296	7.62	34.07	2.20	2.60	200	8.58	33.79	3.14	2.18	26.26	180.7	0.546	
396	6.30	34.05	1.58	2.93	250	8.02	33.99	2.51	2.43	26.50	158.4	0.631	
594	4.86	34.23	0.68	3.33	300	7.58	34.07	2.18	2.62	26.63	147.1	0.708	
891	3.78	34.38	0.41	3.46	400	6.26	34.05	1.59	2.94	26.79	132.2	0.847	
1189	3.22	34.54	0.71	3.32	500	5.41	34.14	1.07	3.20	26.97	115.7	0.971	
					600	4.83	34.23	0.64	3.34	27.11	103.2	1.080	
					700	4.39	34.29	0.46	3.42	27.20	94.5	1.179	
					800	4.03	34.34	0.40	3.46	27.28	87.6	1.270	
					1000	3.57	34.44	0.49	3.43	27.41	76.6	1.435	
CREST; May 8, 1949; 0530 GCT; 35°48'N, 121°52'W; sounding, missing; wind, 325°, force 2; weather, cloudy; sea, moderate; wire angle, 21°.													701
0	11.40	33.46	5.96	1.20	0	11.40	33.46	5.96	1.20	25.53	247.0	0.000	
9	11.34	33.46	5.85	1.19	10	11.32	33.46	5.80	1.19	25.54	245.8	0.025	
22	10.00	33.60	5.40	1.48	20	10.03	33.56	5.38	1.40	25.84	217.0	0.048	
46	9.45	33.77	4.37	1.81	30	9.75	33.68	4.99	1.61	25.98	204.0	0.069	
69	9.00	33.79	3.78	2.11	50	9.40	33.77	4.27	1.82	26.11	192.2	0.108	
92	8.30	33.84	2.90	2.15	75	8.79	33.81	3.52	2.13	26.24	180.2	0.155	
138	7.74	33.93	2.43	2.32	100	8.19	33.85	2.78	2.17	26.36	168.9	0.199	
184	7.26	34.04	2.16	2.50	150	7.61	33.96	2.37	2.37	26.54	153.4	0.279	
278	6.59	34.09	1.37	2.89	200	7.12	34.05	2.03	2.60	26.68	140.6	0.353	
372	6.26	34.18	0.75	3.21	250	6.77	34.07	1.61	2.81	26.74	135.3	0.421	
558	4.94	34.27	0.41	3.36	300	6.50	34.11	1.18	3.00	26.81	129.3	0.488	
838	4.16	34.47	0.52	3.48	400	6.10	34.20	0.66	3.24	26.93	118.8	0.612	
					500	5.36	34.24	0.47	3.33	27.05	107.8	0.725	
					600	4.78	34.30	0.39	3.39	27.17	97.4	0.828	
					700	4.45	34.37	0.39	3.44	27.26	89.0	0.921	
					800	4.23	34.44	0.47	3.48	27.34	82.5	1.006	
					1000	(3.96)	(34.53)	-	-	(27.44)	(74.5)	(1.164)	
CREST; May 7, 1949; 2241 GCT; 35°30'N, 122°36'W; sounding, missing; wind, 290°, force 2; weather, cloudy; sea, rough; wire angle, 4°.													702
0	13.00	33.22	6.32	0.88	0	13.00	33.22	6.32	0.88	25.04	293.6	0.000	
10	12.82	33.17	6.27	0.42	10	12.82	33.17	6.27	0.42	25.03	294.2	0.029	
25	12.08	33.15	6.24	0.44	20	12.35	33.15	6.25	0.42	25.11	287.1	0.059	
50	11.84	33.19	6.25	0.48	30	12.03	33.15	6.25	0.44	25.17	281.5	0.087	
75	10.38	33.40	5.75	1.01	50	11.84	33.19	6.25	0.48	25.24	275.6	0.143	
99	9.63	33.53	4.52	1.39	75	10.38	33.40	5.75	1.01	25.66	236.0	0.207	
148	8.58	-	3.12	-	100	9.64	33.54	4.43	1.39	25.89	213.9	0.263	
198	7.89	33.96	3.14	2.02	150	8.52	33.80	3.12	1.76	26.28	178.4	0.361	
297	6.64	33.98	2.00	2.52	200	7.86	33.96	3.12	2.05	26.50	157.4	0.444	
396	5.80	34.04	1.23	2.92	250	7.20	33.97	2.58	2.31	26.60	148.3	0.521	
594	4.83	34.22	0.41	3.35	300	6.62	33.98	1.97	2.54	26.69	140.6	0.593	
892	3.96	34.40	0.49	3.50	400	5.78	34.04	1.20	2.94	26.84	126.8	0.727	
1190	3.34	34.47	0.86	3.38	500	5.24	34.13	0.68	3.18	26.98	114.5	0.848	
					600	4.81	34.22	0.42	3.35	27.10	103.8	0.957	
					700	4.47	34.30	0.39	3.44	27.20	94.5	1.056	
					800	4.19	34.36	0.44	3.48	27.28	87.8	1.147	
					1000	3.69	34.43	0.58	3.49	27.39	78.6	1.314	

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
703	CREST; May 7, 1949; 1545 GCT; 35°09'N, 123°26'W; sounding, missing; wind, 325°, force 2; weather, overcast; sea, moderate; wire angle, 10°.											
0	13.32	33.10	6.04	0.66	0	13.32	33.10	6.04	0.66	24.88	308.3	0.000
9	13.29	33.12	5.88	0.51	10	13.29	33.12	5.90	0.50	24.90	306.6	0.031
23	13.21	33.12	6.09	0.60	20	13.23	33.12	6.08	0.58	24.91	305.6	0.061
46	12.88	33.15	6.20	0.41	30	13.12	33.12	6.14	0.55	24.93	303.9	0.092
70	11.11	33.04	6.07	0.62	50	12.80	33.15	6.20	0.41	25.02	296.0	0.152
93	9.74	33.22	5.17	1.18	75	10.80	33.05	5.98	0.68	25.32	268.6	0.222
138	8.60	33.69	3.32	1.87	100	9.49	33.32	4.55	1.29	25.75	227.7	0.284
183	8.06	33.93	2.94	2.16	150	8.45	33.77	3.20	1.96	26.26	179.5	0.386
274	7.03	34.05	2.03	2.54	200	7.87	33.97	2.76	2.24	26.51	156.9	0.470
364	6.10	34.07	1.32	2.89	250	7.27	34.04	2.24	2.45	26.65	144.1	0.546
548	4.91	34.20	0.48	3.25	300	6.68	34.05	1.78	2.65	26.74	136.1	0.615
832	4.18	34.40	0.37	3.45	400	5.81	34.09	1.09	2.98	26.88	123.5	0.745
1131	3.52	34.43	0.76	3.25	500	5.14	34.16	0.62	3.18	27.02	111.0	0.863
					600	4.76	34.24	0.39	3.31	27.12	101.5	0.969
					700	4.50	34.32	0.32	3.40	27.22	93.3	1.066
					800	4.26	34.38	0.34	3.44	27.29	87.2	1.156
					1000	3.80	34.42	0.55	3.37	27.37	80.7	1.325
704	CREST; May 7, 1949; 0924 GCT; 34°52'N, 124°07'W; sounding, missing; wind, 310°, force 4; weather, cloudy; sea, rough; wire angle, 14°.											
0	13.5	33.10	6.00	1.22	0	13.5	33.10	6.00	1.22	24.84	311.9	0.000
10	13.47	33.04	5.83	0.58	10	13.47	33.04	5.83	0.58	24.81	315.7	0.031
24	13.16	33.03	5.96	0.54	20	13.25	33.03	5.95	0.54	24.84	312.6	0.063
48	12.17	33.06	6.03	0.52	30	12.96	33.04	6.01	0.52	24.91	306.6	0.094
72	11.49	32.95	5.98	0.61	50	12.11	33.06	6.04	0.52	25.08	290.2	0.153
96	11.18	33.03	5.76	0.74	75	11.45	32.95	5.97	0.62	25.12	287.1	0.226
144	9.40	33.48	4.79	1.37	100	11.06	33.07	5.74	0.75	25.29	271.8	0.296
192	8.32	33.86	3.37	1.86	150	9.26	33.54	4.53	1.36	25.96	208.9	0.416
288	7.29	34.00	2.66	2.36	200	8.20	33.90	3.31	1.91	26.40	166.9	0.510
383	6.21	34.02	1.45	2.80	250	7.63	33.97	2.93	2.18	26.54	154.4	0.589
574	5.15	34.27	0.47	3.18	300	7.17	34.00	2.50	2.42	26.63	146.4	0.665
862	4.09	34.36	0.40	3.42	400	6.05	34.03	1.33	2.84	26.80	130.8	0.804
1159	3.36	-	0.33	3.19	500	5.47	34.14	0.70	3.06	26.96	116.5	0.928
					600	5.04	34.28	0.44	3.22	27.12	102.0	1.037
					700	4.66	34.32	0.38	3.32	27.20	95.2	1.135
					800	4.30	34.35	0.38	3.40	27.26	89.8	1.228
					1000	3.69	(34.41)	0.35	3.35	(27.37)	(79.9)	(1.397)
705	CREST; May 7, 1949; 0328 GCT; 34°35'N, 124°43'W; sounding, missing; wind, 290°, force 2; weather, cloudy; sea, moderate; wire angle, missing.											
0	13.95	33.17	5.77	0.57	0	13.95	33.17	5.77	0.57	24.81	315.5	0.000
10	13.90	33.16	6.26	0.51	10	13.90	33.16	6.26	0.51	24.81	315.5	0.032
24	13.59	33.17	6.24	0.57	20	13.72	33.17	6.26	0.54	24.85	311.5	0.063
49	13.04	33.15	6.30	0.59	30	13.48	33.17	6.26	0.58	24.90	307.1	0.094
73	11.58	33.15	6.61	0.75	50	13.05	33.15	6.36	0.59	24.97	300.8	0.155
98	10.74	33.24	5.90	1.04	75	11.56	33.15	6.62	0.76	25.26	274.2	0.227
147	9.19	33.57	4.25	1.77	100	10.61	33.25	5.84	1.08	25.50	251.0	0.292
197	8.71	33.80	3.12	2.10	150	9.15	33.58	4.08	1.84	26.01	204.2	0.406
296	7.38	33.98	2.54	2.34	200	8.69	33.81	3.09	2.11	26.26	180.7	0.502
395	6.10	34.02	1.47	2.79	250	8.14	33.92	2.86	2.21	26.43	165.5	0.588
592	4.86	34.22	0.54	3.13	300	7.29	33.98	2.50	2.36	26.60	149.5	0.668
889	4.00	34.38	0.49	3.48	400	6.05	34.02	1.44	2.81	26.80	131.6	0.808
1186	3.28	34.47	0.96	3.45	500	5.34	34.11	0.78	3.02	26.95	117.2	0.933
					600	4.81	34.23	0.51	3.14	27.11	103.1	1.043
					700	4.44	34.30	0.40	3.28	27.21	94.1	1.141
					800	4.16	34.35	0.42	3.40	27.28	88.1	1.232
					1000	3.73	34.42	0.68	3.48	27.37	79.8	1.400

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

CREST; May 6, 1949; 2008 GCT; 34°19'N, 125°34'W; sounding, missing; wind, 315°, force 5; weather, cloudy; sea, rough; wire angle, 9°. 706

0	14.15	33.22	6.00	0.47	0	14.15	33.22	6.00	0.47	24.80	315.9	0.000	
10	14.08	33.23	5.93	0.45	10	14.08	33.23	5.93	0.45	24.82	314.2	0.031	
24	14.00	33.22	5.98	-	20	14.04	33.23	5.98	0.47	24.83	313.5	0.063	
43	13.98	33.25	5.89	0.54	30	14.00	33.22	5.95	0.51	24.83	313.8	0.094	
71	12.34	33.15	6.05	0.43	50	13.94	33.25	5.93	0.53	24.87	310.8	0.157	
94	11.78	33.22	5.81	0.53	75	12.27	33.15	6.04	0.44	25.12	287.0	0.231	
138	9.48	33.48	4.48	1.06	100	11.65	33.25	5.68	0.58	25.32	269.1	0.301	
183	8.50	33.86	3.33	1.69	150	9.14	33.59	4.18	1.31	26.01	203.4	0.419	
272	7.72	34.00	2.02	1.91	200	8.30	33.92	3.01	1.74	26.40	166.9	0.512	
362	6.20	33.98	1.83	2.42	250	7.88	33.99	2.27	1.86	26.52	156.4	0.592	
543	4.90	34.14	0.67	3.25	300	7.39	34.00	1.98	2.00	26.60	149.3	0.669	
825	4.09	34.40	-	3.30	400	5.82	33.99	1.58	2.69	26.80	131.0	0.809	
1122	3.25	34.43	0.72	3.28	500	5.13	34.09	0.87	3.14	26.96	116.0	0.933	
					600	4.75	34.21	0.51	3.31	27.10	103.7	1.043	
					700	4.46	34.32	0.39	3.37	27.22	92.8	1.141	
					800	4.17	34.39	0.38	3.38	27.31	85.3	1.230	
					1000	3.61	34.42	0.56	3.34	27.39	78.6	1.394	

CREST; May 6, 1949; 1302 GCT; 34°02'N, 126°16'W; sounding, missing; wind, 045°, force 2; weather, partly cloudy; sea, moderate; wire angle, 24°. 707

0	14.1	32.99	5.93	0.51	0	14.1	32.99	5.93	0.51	24.64	331.5	0.000	
9	14.06	33.01	5.95	0.46	10	14.05	33.01	5.95	0.46	24.66	329.6	0.033	
22	14.09	33.06	5.85	0.46	20	14.08	33.06	5.88	0.46	24.69	326.7	0.066	
45	13.02	34.00r	6.21	0.55	30	14.00	33.10	5.89	0.48	24.74	322.5	0.098	
68	13.24	33.31	5.84	0.50	50	13.02	33.20	6.21	0.54	25.02	296.7	0.160	
81	13.38	33.46	5.74	0.88	75	13.34	33.45	5.78	0.56	25.14	285.1	0.233	
136	10.50	33.28	5.20	1.67	100	13.30	33.42	5.61	1.28	25.13	287.1	0.304	
182	8.56	33.55	4.38	2.14	150	9.81	33.30	4.96	1.81	25.68	235.5	0.436	
274	7.36	33.96	3.41	3.03r	200	8.25	33.69	4.13	2.27	26.23	183.3	0.540	
366	6.10	33.93	2.39	3.03	250	7.64	33.93	3.57	2.53	26.51	157.5	0.625	
551	4.77	34.11	0.72	3.41	300	6.94	33.96	3.17	2.73	26.63	146.3	0.701	
831	3.95	34.43	0.44	3.58	400	5.78	33.93	2.00	3.05	26.76	134.8	0.841	
1219	3.09	34.49	0.97	3.41	500	5.01	34.02	0.99	3.30	26.92	119.9	0.968	
					600	4.63	34.20	0.56	3.48	27.11	103.1	1.080	
					700	4.33	34.33	0.40	3.56	27.24	90.7	1.177	
					800	4.05	34.41	0.39	3.58	27.33	82.6	1.263	
					1000	3.53	34.46	0.60	3.54	27.42	74.7	1.421	

CREST; May 6, 1949; 0547 GCT; 33°57'N, 127°05'W; sounding, missing; wind, 335°, force 5; weather, partly cloudy; sea, rough; wire angle, 43°. 708

0	15.20	33.64	5.79	0.47	0	15.20	33.64	5.79	0.47	24.90	306.4	0.000	
8	15.20	33.57	5.98	0.43	10	15.19	33.57	5.98	0.44	24.85	311.7	0.031	
18	15.17	33.58	5.81	0.43	20	15.15	33.58	5.81	0.44	24.87	310.3	0.062	
37	15.02	-	5.73	0.46	30	15.06	33.61	5.75	0.45	24.91	306.5	0.093	
54	14.53	33.73	5.82	0.40	50	14.81	33.73	5.83	0.42	25.05	293.2	0.153	
72	14.32	33.66	5.88	0.37	75	14.33	33.66	5.90	0.38	25.10	289.1	0.226	
109	14.54	33.91	5.60	0.67	100	14.49	33.86	5.73	0.59	25.22	278.5	0.297	
144	12.66	33.68	5.23	0.71	150	11.92	33.68	5.17	0.73	25.60	243.2	0.427	
216	8.91	33.75	4.43	1.60	200	9.37	33.73	4.63	1.35	26.09	197.4	0.537	
288	7.68	34.00	3.34	2.21	250	8.27	33.90	3.96	1.90	26.39	168.8	0.628	
433	5.98	33.96	1.46	2.98	300	7.52	34.00	3.18	2.28	26.58	151.3	0.709	
660	4.63	34.22	0.42	3.38	400	6.34	33.95	1.88	2.84	26.70	140.4	0.854	
928	3.77	34.47	0.48	3.35	500	5.45	34.03	1.00	3.18	26.88	124.4	0.987	
					600	4.88	34.15	0.55	3.34	27.04	109.8	1.104	
					700	4.44	34.26	0.39	3.40	27.17	97.2	1.207	
					800	4.11	34.36	0.36	3.40	27.29	87.0	1.299	
					1000	(3.60)	(34.48)	-	-	(27.44)	(73.2)	(1.459)	

SIO

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4905

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
709	CREST; May 5, 1949; 2332 GCT; 33°38'N, 127°47'W; sounding, missing; wind, 270°, force 3; weather, overcast; sea, moderate; wire angle, 5°.											
0	15.53	33.57	5.77	0.41	0	15.53	33.57	5.77	0.41	24.77	318.6	0.000
10	15.48	33.51	5.70	0.42	10	15.48	33.51	5.70	0.42	24.74	322.1	0.032
25	15.34	33.53	5.73	0.46	20	15.39	33.53	5.71	0.45	24.77	319.0	0.064
50	14.44	33.51	5.83	0.46	30	15.24	33.53	5.73	0.46	24.81	316.3	0.096
75	14.15	33.55	5.84	0.43	50	14.44	33.51	5.83	0.46	24.97	301.6	0.158
99	14.04	33.55	5.81	0.47	75	14.15	33.55	5.84	0.43	25.05	293.8	0.232
148	12.75	33.64	5.23	0.75	100	14.04	33.55	5.80	0.47	25.08	292.1	0.305
198	8.90	33.57	4.63	1.61	150	12.65	33.64	5.19	0.77	25.43	259.8	0.444
297	7.30	33.93	2.95	2.34	200	8.85	33.57	4.56	1.68	26.04	201.2	0.559
396	6.22	34.05	1.75	2.73	250	7.96	33.75	3.78	2.09	26.32	175.5	0.653
594	4.71	34.18	0.65	3.41	300	7.27	33.94	2.89	2.35	26.57	152.2	0.734
892	3.93	34.36	0.45	3.62	400	6.17	34.06	1.72	2.75	26.81	130.2	0.876
1190	3.13	34.47	0.83	3.49	500	5.31	34.12	1.11	3.13	26.96	116.2	0.999
					600	4.68	34.19	0.64	3.42	27.09	104.3	1.109
					700	4.37	34.25	0.51	3.55	27.17	97.2	1.210
					800	4.14	34.31	0.45	3.61	27.25	91.0	1.304
					1000	3.64	34.42	0.55	3.60	27.38	78.9	1.474
710	CREST; May 5, 1949; 1715 GCT; 33°19'N, 128°27'W; sounding, missing; wind, 010°, force 4; weather, drizzle; sea, very rough; wire angle, 15°.											
0	15.40	33.62	3.24r	0.32	0	15.40	33.62	(5.48)	0.32	24.84	312.2	0.000
10	15.27	33.55	5.46	0.32	10	15.27	33.55	5.46	0.32	24.82	314.8	0.031
24	15.27	33.62	5.71	0.34	20	15.26	33.61	5.68	0.34	24.87	310.2	0.063
48	14.18	33.49	5.74	0.22r	30	15.23	33.62	5.73	0.34	24.88	309.4	0.094
71	13.77r	33.46	5.72	0.31	50	14.20	33.48	5.73	0.32	24.99	299.2	0.154
94	14.02	33.55	5.71	0.32	75	14.06	33.47	5.74	0.31	25.01	297.6	0.229
141	13.60	33.69	5.38	0.46	100	13.99	33.58	5.67	0.32	25.11	288.7	0.302
187	9.70	33.51	4.74	1.03	150	12.70	33.68	5.29	0.50	25.45	257.8	0.440
279	7.86	33.87	3.81	1.87	200	9.38	33.53	4.63	1.16	25.93	212.4	0.557
371	6.54	33.93	2.67	2.42	250	8.32	33.79	4.14	1.61	26.30	177.8	0.654
555	5.13	34.07	0.85	3.12	300	7.54	33.88	3.61	1.98	26.48	160.5	0.738
839	3.85	34.33	0.33	3.41	400	6.24	33.95	2.34	2.56	26.72	139.2	0.888
1133	3.34	34.40	0.84	3.23	500	5.46	34.02	1.28	2.96	26.87	125.2	1.021
					600	4.86	34.11	0.62	3.24	27.01	112.5	1.140
					700	4.37	34.21	0.36	3.38	27.14	100.1	1.246
					800	3.98	34.30	0.30	3.41	27.26	89.8	1.341
					1000	3.51	34.38	0.52	3.35	27.36	80.3	1.511
801	CREST; May 2, 1949; 1908 GCT; 33°44'N, 120°36'W; sounding, missing; wind, 315°, force 5; weather, overcast; sea, rough; wire angle, 53°.											
0	12.40	33.43	5.95	-	0	12.40	33.43	5.95	(0.66)	25.31	267.4	0.000
6	12.34	33.37	5.99	0.67	10	12.35	33.40	6.01	0.68	25.30	268.5	0.027
15	12.33	33.48	5.93	0.70	20	12.26	33.48	5.99	0.74	25.38	261.0	0.053
30	12.07	-	-	-	30	12.07	33.47	5.92	0.89	25.41	258.8	0.079
42	11.02	33.46	5.30	1.12	50	10.48	33.48	4.80	1.36	25.70	231.0	0.128
56	10.24	33.51	4.58	1.58	75	9.57	33.59	3.97	1.76	25.94	208.7	0.183
82	9.46	33.62	3.74	1.83	100	8.94	33.79	3.24	1.94	26.20	184.4	0.232
108	8.74	33.87	3.06	1.99	150	8.23	34.02	2.72	2.20	26.49	157.8	0.318
155	8.18	34.03	2.69	2.12	200	7.75	34.07	2.30	2.38	26.60	147.8	0.395
202	7.74	34.07	2.30	2.39	250	7.28	34.10	1.82	2.52	26.69	139.8	0.466
293	6.90	34.14	1.44	2.63	300	6.87	34.15	1.37	2.64	26.79	131.4	0.534
434	6.13	34.27	0.61	2.88	400	6.25	34.24	0.74	2.82	26.94	117.9	0.659
628	5.23	34.40	-	3.31	500	5.75	34.32	-	3.02	27.07	106.8	0.771
					600	5.35	34.38	-	3.25	27.17	98.5	0.874

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

CREST; May 3, 1949; 0223 GCT; 33°28'N, 121°10'W; sounding, missing; wind, 290°, force 6; weather, cloudy; sea, rough; wire angle, 37°. 802

0	12.9	33.39	6.08	0.48	0	12.9	33.39	6.08	0.48	25.20	278.3	0.000	
8	12.85	33.40	5.97	0.53	10	12.85	33.40	5.98	0.53	25.21	277.7	0.028	
19	12.85	33.40	6.00	0.51	20	12.85	33.40	5.99	0.51	25.21	277.9	0.056	
39	12.72	33.40	5.90	0.53	30	12.81	33.40	5.96	0.51	25.21	277.5	0.083	
58	11.67	33.33	5.64	0.64	50	12.14	33.36	5.76	0.58	25.31	268.7	0.138	
77	10.04	33.37	4.96	1.25	75	10.30	33.36	5.02	1.20	25.64	237.4	0.201	
113	8.75	33.62	3.76	1.73	100	8.92	33.48	4.23	1.56	25.96	207.1	0.257	
149	8.58	33.93	2.56	2.05	150	8.58	33.93	2.57	2.04	26.37	169.6	0.351	
221	7.78	34.07	2.07	2.30	200	8.16	34.05	2.23	2.24	26.53	155.2	0.432	
293	7.01	34.11	1.42	2.56	250	7.35	34.09	1.82	2.41	26.68	141.5	0.506	
439	6.22	34.27	0.48	2.78	300	6.96	34.11	1.38	2.58	26.75	135.5	0.575	
661	4.90	34.33	0.33	3.14	400	6.42	34.21	0.67	2.73	26.90	122.4	0.704	
916	3.89	34.43	0.60	3.22	500	5.86	34.31	0.38	2.88	27.05	108.9	0.820	
					600	5.28	34.32	0.32	3.06	27.13	102.1	0.925	
					700	4.74	34.34	0.34	3.17	27.20	94.8	1.024	
					800	4.28	34.38	0.44	3.21	27.29	87.4	1.116	
					1000	(3.67)	(34.45)	-	-	(27.40)	(77.0)	(1.280)	

CREST; May 3, 1949; 0943 GCT; 33°10'N, 121°44'W; sounding, missing; wind, 315°, force 6; weather, cloudy; sea, rough; wire angle, 42°. 803

0	13.60	33.21	5.96	0.51	0	13.60	33.21	5.96	0.51	24.91	305.8	0.000	
7	13.54	33.19	5.64	0.52	10	13.55	33.18	5.62	0.52	24.89	307.3	0.031	
17	13.56	33.15	6.05	0.44	20	13.55	33.15	5.70	0.43	24.87	309.7	0.062	
35	13.53	33.21	5.94	0.44	30	13.53	33.19	6.00	0.43	24.91	306.6	0.092	
52	13.54	33.21	5.88	0.22r	50	13.53	33.21	5.89	0.40	24.92	305.7	0.153	
69	12.15	33.24	5.96	0.36	75	11.75	33.26	5.95	0.35	25.31	269.5	0.225	
100	10.44	33.35	5.45	0.17r	100	10.44	33.35	5.45	0.42	25.62	240.5	0.289	
129	9.20	33.55	4.30	1.47	150	8.79	33.72	3.76	1.65	26.17	188.3	0.397	
182	8.30	33.93	3.21	1.89	200	8.03	33.98	3.00	2.05	26.49	158.4	0.483	
236	7.51	34.04	2.53	2.26	250	7.30	34.05	2.35	2.32	26.65	143.8	0.559	
341	6.19	34.07	1.32	2.68	300	6.67	34.06	1.75	2.54	26.75	135.3	0.628	
502.	5.55	34.22	0.62	2.96	400	5.80	34.13	1.25	2.84	26.91	120.4	0.756	
					500	5.56	34.22	0.63	2.96	27.01	111.8	0.872	

CREST; May 3, 1949; 2319 GCT; 32°34'N, 123°41'W; sounding, missing; wind, 315°, force 5; weather, cloudy; sea, rough; wire angle, 29°. 805

0	14.30	33.29	5.76	0.40	0	14.30	33.29	5.76	0.40	24.82	313.8	0.000	
9	14.24	33.24	5.70	0.28	10	14.25	33.24	5.70	0.28	24.80	316.7	0.031	
22	14.25	33.31	5.57	0.31	20	14.25	33.31	5.58	0.31	24.85	311.7	0.063	
44	14.21	33.19	5.71	0.25	30	14.25	33.29	5.60	0.30	24.84	313.1	0.094	
66	13.34	33.19	5.86	0.30	50	14.11	33.18	5.79	0.25	24.78	319.3	0.158	
87	12.74	33.28	5.94	0.45	75	13.06	33.22	5.93	0.35	25.02	296.5	0.234	
132	10.90	33.37	5.10	1.08	100	12.27	33.31	5.84	0.56	25.25	275.8	0.306	
176	9.40	33.68	3.55	1.67	150	10.15	33.47	4.36	1.40	25.75	228.3	0.432	
262	8.26	34.02	2.22	2.37	200	8.92	33.81	3.11	1.93	26.22	184.4	0.535	
351	7.18	34.11	1.48	2.66	250	8.35	34.00	2.37	2.30	26.46	162.6	0.622	
528	5.82	34.23	0.54	3.18	300	7.79	34.07	1.84	2.51	26.60	150.0	0.700	
798	4.54	34.34	0.34	3.45	400	6.68	34.15	1.16	2.82	26.82	130.2	0.840	
1077	3.42	34.47	0.94	3.21	500	5.94	34.21	0.62	3.10	26.96	117.4	0.964	
					600	5.48	34.27	0.39	3.29	27.06	108.3	1.076	
					700	5.00	34.31	0.31	3.39	27.15	100.2	1.181	
					800	4.54	34.34	0.30	3.44	27.23	93.5	1.278	
					1000	3.69	34.43	0.68	3.32	27.39	78.7	1.451	

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4905

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
807	CREST; May 4, 1949; 1027 GCT; 32°07'N, 124°54'W; sounding, missing; wind, 315°, force 6; weather, partly cloudy; sea, rough; wire angle, 41°.											
0	14.40	33.31	5.86	0.42	0	14.40	33.31	5.86	0.42	24.82	314.2	0.000
7	14.45	33.39	5.87	0.27	10	14.48	33.38	5.87	0.28	24.86	311.0	0.031
18	14.48	33.31	5.87	0.30	20	14.49	33.31	5.87	0.30	24.80	316.6	0.063
36	14.46	33.35	5.84	0.29	30	14.47	33.34	5.86	0.30	24.83	314.4	0.094
53	13.34	33.30	5.93	0.24	50	13.39	33.31	5.91	0.25	25.03	295.7	0.155
69	13.26	33.24	5.90	0.24	75	13.19	33.24	5.90	0.26	25.01	297.5	0.229
104	12.58	33.31	5.85	0.43	100	12.73	33.30	5.88	0.40	25.15	285.0	0.302
139	10.94	33.30	5.31	0.91	150	10.58	33.35	4.98	1.13	25.59	244.2	0.435
209	9.16	33.75	3.41	1.83	200	9.33	33.71	3.54	1.77	26.08	198.3	0.545
279	7.97	33.96	2.67	1.97	250	8.45	33.88	2.91	1.91	26.35	173.0	0.638
419	6.09	34.05	1.43	2.76	300	7.62	33.99	2.47	2.09	26.56	153.5	0.719
629	4.82	34.25	0.37	3.17	400	6.30	34.05	1.58	2.68	26.79	132.7	0.862
910	4.02	34.36	0.47	3.19	500	5.52	34.11	0.88	3.00	26.93	119.4	0.988
					600	4.95	34.21	0.41	3.14	27.08	106.1	1.101
					700	4.53	34.30	0.29	3.20	27.20	95.2	1.202
					800	4.24	34.34	0.33	3.21	27.26	90.0	1.294
					1000	(3.85)	(34.42)	-	-	(27.36)	(81.3)	(1.465)
809	CREST; May 4, 1949; 2212 GCT; 31°33'N, 126°31'W; sounding, missing; wind, 290°, force 5; weather, cloudy; sea, very rough; wire angle, 20°.											
0	15.34	33.39	5.76	0.56	0	15.34	33.39	5.76	0.56	24.68	327.8	0.000
8	15.34	33.39	5.76	0.40	10	15.34	33.39	5.79	0.39	24.68	328.2	0.033
23	15.31	33.44	5.89	0.37	20	15.33	33.44	5.87	0.38	24.72	324.2	0.065
46	14.13	33.35	5.93	0.35	30	15.28	33.43	5.92	0.36	24.72	324.3	0.098
70	13.63	33.28	5.89	0.34	50	14.01	33.34	5.94	0.35	24.92	305.6	0.161
93	13.40	33.31	5.90	0.37	75	13.57	33.28	5.90	0.34	24.97	302.0	0.237
138	11.96	33.15	5.86	0.39	100	13.28	33.31	5.91	0.38	25.05	294.7	0.311
184	10.22	33.39	4.89	0.56	150	11.43	33.18	5.81	0.40	25.30	271.2	0.452
276	8.23	33.98	2.64	2.20	200	9.85	33.59	4.17	0.96	25.90	215.5	0.575
367	7.02	34.09	1.82	2.63	250	8.73	33.91	2.95	1.93	26.33	175.0	0.672
550	5.44	34.18	0.58	3.01	300	7.89	34.02	2.44	2.35	26.54	155.2	0.754
828	4.28	34.38	0.43	3.28	400	6.69	34.11	1.54	2.72	26.78	133.3	0.899
1114	3.57	34.45	0.79	3.30	500	5.83	34.16	0.85	2.92	26.93	119.7	1.025
					600	5.16	34.22	0.47	3.08	27.06	107.9	1.139
					700	4.70	34.28	0.41	3.18	27.16	98.8	1.243
					800	4.36	34.36	0.42	3.26	27.26	89.8	1.337
					1000	3.81	34.44	0.61	3.32	27.38	79.4	1.506
901	N. B. SCOFIELD; April 28, 1949; 2203 GCT; 32°41'N, 118°09'W; sounding, missing; wind, 270°, force 4; weather, cloudy; sea, moderate; wire angle, 35°.											
0	14.88	33.48	5.93	0.39r	0	14.88	33.48	5.93	(0.62)	24.85	311.6	0.000
7	14.48	33.51	5.94	0.62	10	14.47	33.51	5.92	0.61	24.96	301.3	0.031
17	13.29	33.46	5.35	0.60	20	13.16	33.46	5.35	0.60	25.19	279.5	0.060
36	12.40	33.49	5.40	0.93	30	12.70	33.48	5.43	0.64	25.30	269.7	0.087
55	11.30	33.47	5.00	1.23	50	11.61	33.47	5.17	1.14	25.49	251.0	0.139
72	10.56	33.58	4.60	1.70	75	10.40	33.60	4.55	1.74	25.81	221.4	0.198
108	9.57	33.80	2.85	2.09	100	9.75	33.75	3.40	2.01	26.04	200.2	0.251
144	9.12	33.95	2.30	2.36	150	9.07	33.97	2.25	2.38	26.32	173.8	0.344
213	8.53	34.13	1.77	2.55	200	8.67	34.12	1.87	2.51	26.50	157.7	0.427
279	7.71	34.14	1.27	2.78	250	8.08	34.14	1.47	2.68	26.61	148.3	0.504
412	6.81	34.29	0.63	3.04	300	7.57	34.15	1.13	2.82	26.69	141.0	0.576
632	5.36	34.31	0.35	3.33	400	6.88	34.28	0.67	3.02	26.89	123.2	0.708
928	4.25	34.36	0.50	3.29	500	6.22	34.29	0.45	3.17	26.99	115.1	0.827
					600	5.56	34.30	0.35	3.30	27.08	107.1	0.938
					700	5.00	34.32	0.36	3.35	27.16	99.5	1.042
					800	4.62	34.34	0.42	3.34	27.22	94.5	1.139
					1000	(4.02)	(34.43)	-	-	(27.35)	(82.6)	(1.315)

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	
N. B. SCOFIELD; May 14, 1949; 0325, 0350 GCT; 32°23'N, 118°48'W; sounding, 750 fm; wind, 135°, force 1; weather, overcast; sea, moderate; wire angle, 0°.													902
0	14.07	33.44	5.31	0.59	0	14.07	33.44	5.31	0.59	24.99	298.4	0.000	
10	13.28	33.46	5.26	0.54	10	13.28	33.46	5.26	0.54	25.16	281.9	0.029	
25	12.40	33.42	5.40	0.73	20	12.63	33.43	5.38	0.66	25.27	271.8	0.056	
50	11.20	33.51	4.54	1.04	30	12.10	33.43	5.12	0.80	25.37	262.5	0.083	
75	10.40	33.51	3.84	1.30	50	11.20	33.51	4.54	1.04	25.60	240.9	0.133	
100	9.53	33.75	2.96	1.75	75	10.40	33.51	3.84	1.30	25.74	228.0	0.192	
					100	9.53	33.75	2.96	1.75	26.07	197.0	0.245	
150	8.62	33.98	2.05	2.19	150	8.62	33.98	2.05	2.19	26.40	166.4	0.336	
200	8.22	34.13	1.50	2.42	200	8.22	34.13	1.50	2.42	26.58	150.2	0.416	
300	7.46	34.22	0.91	2.69	250	7.83	34.18	1.15	2.57	26.68	141.6	0.488	
400	-	34.29	0.53	2.87	300	7.46	34.22	0.91	2.69	26.76	134.2	0.557	
600	5.53	34.33	0.30	3.07	400	6.77	34.29	0.53	2.87	26.91	121.0	0.685	
900	4.26	34.43	0.44	3.16	500	6.13	34.32	0.36	2.99	27.02	111.6	0.801	
1250	3.30	34.52	0.85	3.20	600	5.53	34.33	0.30	3.07	27.10	104.7	0.910	
					700	5.06	34.36	0.24	3.12	27.18	97.3	1.011	
					800	4.64	34.40	0.31	3.15	27.26	90.4	1.105	
					1000	3.94	34.46	0.59	3.18	27.38	79.6	1.275	
N. B. SCOFIELD; May 13, 1949; 2210 GCT; 32°04'N, 119°25'W; sounding, 950 fm; wind, 135°, force 2; weather, partly cloudy; sea, rough; wire angle, 15°.													903
0	13.90	33.35	5.75	0.48	0	13.90	33.35	5.75	0.48	24.95	301.4	0.000	
10	13.96	33.33	5.71	0.46	10	13.96	33.33	5.71	0.46	24.93	304.1	0.030	
24	13.60	33.35	5.80	0.51	20	13.72	33.34	5.77	0.50	24.98	299.1	0.060	
48	12.97	33.31	5.80	0.55	30	13.50	33.35	5.81	0.52	25.04	294.4	0.090	
72	12.02	33.33	5.60	0.76	50	12.83	33.31	5.78	0.56	25.14	284.8	0.148	
95	11.61	33.40	5.37	0.89	75	11.97	33.34	5.59	0.77	25.33	267.5	0.217	
141	10.52	33.55	4.03	1.56	100	11.50	33.42	5.25	0.95	25.48	253.8	0.282	
187	9.14	33.89	2.57	2.17	150	10.00	33.61	3.73	1.70	25.89	215.4	0.400	
281	8.08	34.14	1.45	2.66	200	8.98	33.97	2.34	2.28	26.34	173.5	0.497	
375	6.99	34.20	0.82	2.90	250	8.43	34.10	1.69	2.55	26.52	156.5	0.579	
564	5.44	34.27	0.45	3.13	300	7.87	34.16	1.28	2.73	26.66	144.5	0.655	
854	4.38	34.40	0.45	3.27	400	6.71	34.21	0.74	2.94	26.86	126.2	0.790	
1200	3.41	34.51	0.83	3.25	500	5.83	34.25	0.54	3.07	27.00	113.1	0.910	
					600	5.30	34.29	0.43	3.16	27.10	104.5	1.018	
					700	4.90	34.33	0.39	3.22	27.18	97.6	1.119	
					800	4.56	34.38	0.40	3.26	27.26	90.7	1.214	
					1000	3.92	34.45	0.62	3.28	27.38	80.1	1.384	
N. B. SCOFIELD; May 13, 1949; 1639 GCT; 31°44'N, 120°10'W; sounding, 2,130 fm; wind 135°, force 1; weather, overcast; sea, slight; wire angle, 0°.													904
0	14.70	33.53	5.26	0.39	0	14.70	33.53	5.26	0.39	24.92	304.2	0.000	
10	14.57	33.44	5.30	0.39	10	14.57	33.44	5.30	0.39	24.88	308.5	0.030	
25	14.34	33.48	5.04	0.43	20	14.40	33.46	5.10	0.40	24.93	303.8	0.061	
50	13.96	33.40	5.61	0.47	30	14.27	33.48	5.05	0.44	24.98	300.0	0.091	
75	11.70	33.31	5.25	0.74	50	13.96	33.40	5.61	0.47	24.98	300.1	0.151	
100	10.06	33.49	3.98	1.42	75	11.70	33.31	5.25	0.74	25.35	265.0	0.222	
150	9.25	33.91	2.33	1.99	100	10.06	33.49	3.98	1.42	25.79	224.2	0.283	
200	8.62	34.07	2.02	2.23	150	9.25	33.91	2.33	1.99	26.25	181.2	0.385	
300	7.39	34.14	1.12	2.63	200	8.62	34.07	2.02	2.23	26.47	160.7	0.470	
400	6.73	34.23	0.70	2.84	250	7.97	34.11	1.58	2.44	26.60	148.7	0.548	
600	5.64	34.34	0.35	2.97	300	7.39	34.14	1.12	2.63	26.71	139.3	0.619	
900	4.30	34.44	0.06r	3.16	400	6.73	34.23	0.70	2.84	26.87	125.0	0.751	
1250	3.36	34.51	0.91	3.10	500	6.17	34.29	0.45	2.91	26.99	114.4	0.871	
					600	5.64	34.34	0.35	2.97	27.10	105.1	0.981	
					700	5.10	34.38	0.35	3.04	27.20	96.3	1.081	
					800	4.64	34.41	0.38	3.09	27.27	89.7	1.174	
					1000	3.98	34.46	0.55	3.16	27.38	79.8	1.344	

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

905 N. B. SCOFIELD; May 13, 1949; 1047 GCT; 31°26'N, 120°52'W; sounding, 1,950 fm; wind, 270°, force 1; weather, overcast; sea, slight; wire angle, 9°.

0	14.00	33.37	5.80	0.51	0	14.00	33.37	5.80	0.51	24.95	302.0	0.000
10	14.03	33.31	5.86	0.53	10	14.03	33.31	5.86	0.53	24.90	307.0	0.030
24	13.94	33.37	5.81	0.48	20	13.95	33.36	5.83	0.48	24.95	302.2	0.061
48	13.37	33.30	5.81	0.49	30	13.83	33.35	5.81	0.47	24.97	300.8	0.091
73	12.35	33.30	5.58	0.72	50	13.31	33.30	5.80	0.49	25.04	294.8	0.151
98	11.17	33.48	4.83	1.12	75	12.25	33.30	5.50	0.72	25.24	275.4	0.222
147	9.82	33.71	3.32	1.89	100	11.07	33.48	4.66	1.14	25.60	241.9	0.286
197	8.40	33.98	2.80	2.12	150	9.75	33.75	3.30	1.89	26.04	201.3	0.397
295	7.12	34.11	1.56	2.69	200	8.36	33.99	2.78	2.15	26.45	162.6	0.488
394	6.28	34.13	0.81	2.98	250	7.63	34.08	2.17	2.46	26.63	146.3	0.566
592	5.19	34.22	0.38	3.21	300	7.07	34.11	1.50	2.70	26.73	136.9	0.636
889	4.18	34.43	0.55	3.32	400	6.24	34.13	0.80	2.99	26.86	125.9	0.773
1235	3.29	34.52	0.98	3.20	500	5.62	34.17	0.50	3.12	26.97	116.3	0.894
					600	5.15	34.22	0.38	3.22	27.06	107.8	1.026
					700	4.80	34.29	0.38	3.28	27.16	99.4	1.130
					800	4.45	34.37	0.45	3.31	27.26	90.4	1.225
					1000	3.82	34.48	0.69	3.29	27.41	76.7	1.392

906 N. B. SCOFIELD; May 13, 1949; 0507 GCT; 31°07'N, 121°34'W; sounding, 2,150 fm; wind, 290°, force 3; weather, overcast; sea, moderate; wire angle, 4°.

0	15.00	33.51	4.88	0.40	0	15.00	33.51	4.88	0.40	24.84	311.8	0.000
10	15.25	33.40	4.92	0.39	10	15.25	33.40	4.92	0.39	24.71	325.2	0.032
25	14.78	33.44	5.00	0.43	20	14.95	33.44	4.96	0.41	24.80	316.6	0.064
50	13.93	33.37	5.35	0.46	30	14.64	33.43	5.05	0.44	24.86	311.3	0.095
75	12.58	33.33	5.16	0.55	50	13.93	33.37	5.35	0.46	24.96	301.7	0.157
99	11.28	33.30	4.68	0.95	75	12.58	33.33	5.16	0.55	25.20	279.4	0.229
149	9.22	33.68	3.52	1.63	100	11.27	33.30	4.67	0.95	25.43	258.5	0.296
199	8.46	33.95	2.52	2.06	150	9.20	33.70	3.49	1.64	26.09	196.0	0.410
298	7.46	34.09	1.59	2.51	200	8.43	33.96	2.51	2.07	26.41	166.1	0.501
398	6.37	34.09	0.80	2.93	250	7.90	34.07	2.03	2.30	26.58	150.9	0.579
597	5.42	34.33	0.31	3.17	300	7.43	34.09	1.57	2.52	26.66	143.5	0.654
898	4.21	34.40	0.50	3.29	400	6.36	34.09	0.79	2.94	26.81	130.6	0.791
1248	3.26	34.52	0.98	3.18	500	5.87	34.20	0.47	3.07	26.96	117.3	0.915
					600	5.40	34.33	0.30	3.18	27.12	102.9	1.025
					700	4.98	34.36	0.28	3.25	27.19	96.2	1.129
					800	4.57	34.38	0.37	3.29	27.26	90.9	1.223
					1000	3.90	34.43	0.65	3.28	27.37	81.3	1.395

907 N. B. SCOFIELD; May 12, 1949; 2320 GCT; 30°39'N, 122°14'W; sounding, 2,210 fm; wind, 292°, force 1; weather, overcast; sea, moderate; wire angle, 4°.

0	16.64	33.51	5.55	0.45	0	16.64	33.51	5.55	0.45	24.47	347.1	0.000
10	15.42	33.52	5.40	0.39	10	15.42	33.52	5.40	0.39	24.76	320.5	0.033
25	15.37	33.48	5.54	0.41	20	15.40	33.49	5.43	0.39	24.74	322.3	0.066
50	14.82	33.46	5.55	0.44	30	15.17	33.47	5.56	0.41	24.78	319.2	0.098
75	12.62	33.39	5.43	0.54	50	14.82	33.46	5.55	0.44	24.85	312.5	0.161
100	11.43	33.37	5.15	0.89	75	12.62	33.39	5.43	0.54	25.24	275.8	0.234
149	9.40	33.66	3.34	1.84	100	11.43	33.37	5.15	0.89	25.45	256.3	0.301
199	8.48	33.96	2.53	2.20	150	9.36	33.66	3.33	1.84	26.03	201.5	0.415
298	7.27	34.11	1.57	2.66	200	8.45	33.97	2.52	2.20	26.42	165.4	0.507
398	6.27	34.14	0.93	3.01	250	7.82	34.07	1.98	2.45	26.59	149.8	0.585
598	5.25	34.40	0.40	3.25	300	7.25	34.11	1.56	2.66	26.71	139.5	0.658
897	4.12	34.40	0.58	3.30	400	6.25	34.14	0.91	3.01	26.86	125.3	0.791
1246	3.31	34.49	1.12	3.23	500	5.69	34.28	0.55	3.17	27.04	109.1	0.908
					600	5.24	34.40	0.39	3.25	27.19	95.7	1.010
					700	4.83	34.40	0.39	3.29	27.24	91.5	1.104
					800	4.44	34.40	0.46	3.30	27.29	87.8	1.193
					1000	3.83	34.42	0.74	3.29	27.37	81.1	1.362

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	908
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	
N. B. SCOFIELD; May 12, 1949; 1740 GCT; 30°28'N, 122°53'W; sounding, 2,250 fm; wind, 315°, force 2; weather, overcast; sea, moderate; wire angle, 0°.													
0	16.55	33.53	5.11	0.39	0	16.55	33.53	5.11	0.39	24.51	343.4	0.000	
10	15.75	33.51	5.21	0.36	10	15.75	33.51	5.21	0.36	24.68	328.2	0.034	
25	15.75	33.49	4.98	0.36	20	15.75	33.49	5.11	0.35	24.66	329.6	0.066	
50	15.26	33.49	4.60	0.39	30	15.73	33.49	4.89	0.36	24.67	329.5	0.099	
74	13.31	33.40	5.71	0.40	50	15.26	33.49	4.60	0.39	24.77	320.0	0.164	
98	12.14	33.33	5.39	0.39	75	13.26	33.40	5.70	0.40	25.12	386.9	0.251	
147	10.01	33.46	4.52	1.31	100	12.12	33.33	5.38	0.39	25.28	272.0	0.321	
196	8.79	33.89	2.75	1.90	150	9.82	33.46	4.45	1.34	25.80	223.4	0.445	
295	7.46	34.05	2.18	2.39	200	8.73	33.90	2.70	1.91	26.32	175.1	0.544	
395	6.26	34.11	1.14	2.79	250	8.08	33.99	2.44	2.18	26.49	159.4	0.627	
595	5.07	34.29	0.35	3.14	300	7.38	34.06	2.14	2.41	26.65	144.9	0.704	
895	4.14	34.42	0.52	3.20	400	6.23	34.11	1.10	2.81	26.84	127.1	0.839	
1245	3.34	34.52	0.95	3.15	500	5.57	34.21	0.56	3.06	27.00	112.7	0.959	
					600	5.05	34.29	0.35	3.14	27.13	101.5	1.066	
					700	4.68	34.34	0.33	3.17	27.21	94.1	1.164	
					800	4.40	34.38	0.40	3.19	27.27	88.8	1.256	
					1000	3.88	34.46	0.67	3.19	27.39	78.7	1.424	
N. B. SCOFIELD; May 12, 1949; 1145 GCT; 30°10'N, 123°36'W; sounding, 2,200 fm; wind, 315°, force 2; weather, overcast; sea, moderate; wire angle, 15°.													909
0	16.73	33.49	5.53	0.46	0	16.73	33.49	5.53	0.46	24.44	350.4	0.000	
9	15.75	33.48	5.49	0.40	10	15.75	33.48	5.48	0.40	24.65	330.1	0.034	
23	15.70	33.51	5.56	0.40	20	15.72	33.51	5.55	0.40	24.69	327.5	0.067	
48	15.39	33.46	5.63	0.42	30	15.63	33.50	5.59	0.40	24.70	326.7	0.100	
72	13.28	33.31	5.92	0.43	50	15.32	33.46	5.65	0.42	24.74	323.4	0.165	
95	11.44	33.28	5.44	0.75	75	13.05	33.30	5.91	0.47	25.09	290.5	0.241	
142	9.64	33.48	4.49	1.40	100	11.25	33.29	5.35	0.84	25.42	259.1	0.310	
190	8.64	33.84	3.44	1.88	150	9.40	33.56	4.29	1.51	25.95	209.6	0.427	
284	7.47	34.05	2.14	2.45	200	8.52	33.88	3.27	1.96	26.34	173.4	0.523	
379	6.39	34.13	1.14	2.83	250	7.87	34.00	2.58	2.28	26.53	155.7	0.605	
573	5.46	34.25	0.48	3.11	300	7.28	34.07	1.94	2.54	26.67	142.6	0.680	
865	4.17	34.42	0.51	3.14	400	6.25	34.15	1.02	2.88	26.87	124.7	0.814	
1208	3.29	34.54	0.98	3.14	500	5.77	34.21	0.62	3.04	26.98	115.3	0.934	
					600	5.32	34.27	0.43	3.12	27.08	106.3	1.045	
					700	4.82	34.33	0.39	3.14	27.18	96.7	1.146	
					800	4.38	34.38	0.44	3.14	27.28	88.8	1.239	
					1000	3.79	34.48	0.68	3.14	27.42	76.2	1.404	
N. B. SCOFIELD; May 12, 1949; 0547 GCT; 29°51'N, 124°15'W; sounding, 2,275 fm; wind, 315°, force 2; weather, overcast; sea, moderate; wire angle, 4°.													910
0	15.33	33.33	4.90	0.28	0	15.33	33.33	4.90	0.28	24.63	332.0	0.000	
10	15.53	33.42	5.28	0.26	10	15.53	33.42	5.28	0.26	24.66	329.8	0.033	
25	15.50	33.42	5.18	0.27	20	15.53	33.42	5.22	0.27	24.66	330.0	0.066	
49	14.94	33.42	5.06	0.28	30	15.40	33.42	5.13	0.28	24.69	327.7	0.099	
73	13.90	33.39	5.47	0.24	50	14.93	33.42	5.08	0.28	24.79	318.3	0.164	
98	13.68	33.33	5.65	0.26	75	13.88	33.38	5.50	0.24	24.98	300.7	0.241	
146	11.49	33.30	4.73	0.68	100	13.67	33.33	5.65	0.27	24.99	300.8	0.316	
195	9.24	33.66	3.58	1.49	150	11.25	33.30	4.57	0.75	25.43	259.3	0.456	
293	7.82	34.04	2.36	2.11	200	9.13	33.70	3.50	1.53	26.10	195.8	0.570	
408	6.30	34.07	1.18	2.65	250	8.37	33.98	2.85	1.85	26.44	164.1	0.660	
570	5.55	34.27	0.37	3.01	300	7.70	34.05	2.27	2.15	26.59	150.3	0.739	
887	4.18	34.47	0.46	3.12	400	6.36	34.07	1.25	2.62	26.80	131.8	0.879	
1235	3.28	34.51	0.89	3.10	500	5.85	34.18	0.57	2.89	26.95	118.3	1.004	
					600	5.40	34.30	0.37	3.05	27.09	105.2	1.116	
					700	4.94	34.39	0.36	3.09	27.22	93.7	1.216	
					800	4.50	34.44	0.40	3.12	27.31	85.4	1.305	
					1000	3.87	34.49	0.59	3.13	27.42	76.4	1.467	

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
911	N. B. SCOFIELD; May 11, 1949; 2357 GCT; 29°34'N, 124°56'W; sounding, 2,350 fm; wind, 315°, force 2; weather overcast; sea, moderate; wire angle 2°.											
0	15.22r	33.40	5.46	0.42	0	(15.77)	33.40	5.46	0.42	(24.59)	(336.0)	0.000
9	15.75	33.40	5.55	0.41	10	15.75	33.40	5.55	0.41	24.60	335.9	0.034
24	15.63	33.40	5.44	0.41	20	15.68	33.40	5.47	0.41	24.61	334.6	0.067
48	15.46	33.64	5.64	0.36	30	15.57	33.41	5.53	0.40	24.64	332.0	0.100
73	15.42	33.78	5.45	0.50	50	15.48	33.65	5.61	0.36	24.85	312.7	0.165
98	15.22	33.89	5.40	0.48	75	15.42	33.80	5.45	0.50	24.98	301.3	0.242
147	12.61	33.60	5.29	0.88	100	15.23	33.89	5.40	0.49	25.09	291.2	0.316
197	9.37	33.53	4.30	1.55	150	12.27	33.59	5.23	0.93	25.47	256.0	0.452
296	7.68	34.04	2.38	2.36	200	9.32	33.53	4.24	1.58	25.94	211.5	0.570
395	6.81	34.11	1.26	2.79	250	8.30	33.96	3.24	2.02	26.43	165.0	0.664
593	5.40	34.29	0.60	3.08	300	7.66	34.05	2.32	2.38	26.60	149.8	0.743
892	4.12	34.49	0.56	3.22	400	6.78	34.11	1.22	2.80	26.77	134.5	0.884
1241	3.30	34.51	0.99	3.16	500	6.01	34.19	0.79	2.96	26.93	119.7	1.011
					600	5.35	34.30	0.59	3.07	27.10	104.5	1.122
					700	4.80	34.40	0.50	3.16	27.24	91.2	1.219
					800	4.40	34.46	0.50	3.20	27.34	83.0	1.306
					1000	3.82	34.50	0.68	3.22	27.43	75.1	1.464
1001	N. B. SCOFIELD; May 8, 1949; 2211 GCT; 31°18'N, 116°53'W; sounding, 540 fm; wind, 290°, force 4; weather, cloudy, sea, moderate; wire angle, 19°.											
0	15.78	33.66	4.57	0.24	0	15.78	33.66	4.57	0.24	24.79	317.2	0.000
9	16.14	33.64	5.07	0.20	10	16.13	33.64	5.09	0.21	24.69	326.5	0.032
22	14.58	33.57	5.17	0.29	20	15.05	33.58	5.17	0.28	24.89	308.1	0.064
45	10.56	33.68	3.26	1.56	30	11.55	33.58	5.00	0.45	25.59	241.4	0.091
68	10.02	33.78	2.68	1.83	50	10.42	33.70	3.13	1.65	25.89	213.4	0.137
90	9.69	33.92	2.23	1.98	75	9.92	33.81	2.50	1.89	26.06	197.8	0.188
134	9.13	34.11	1.78	2.19	100	9.56	34.02	2.07	2.04	26.28	177.1	0.235
179	8.63	34.11	1.66	2.30	150	8.94	34.11	1.72	2.24	26.45	161.8	0.320
271	7.62	34.16	1.24	2.58	200	8.40	34.12	1.63	2.36	26.54	153.6	0.399
365	7.10	34.25	0.66	2.84	250	7.83	34.14	1.39	2.52	26.65	144.6	0.473
559	5.81	34.29	0.34	3.10	300	7.43	34.20	1.05	2.67	26.75	135.3	0.544
857	4.34	34.43	0.47	3.23	400	6.82	34.26	0.56	2.92	26.88	124.1	0.672
					500	6.16	34.28	0.37	3.06	26.99	115.0	0.793
					600	5.59	34.31	0.32	3.13	27.08	106.9	0.904
					700	5.08	34.36	0.34	3.18	27.18	97.5	1.006
					800	4.60	34.41	0.41	3.22	27.28	89.2	1.099
					1000	(3.86)	(34.48)	-	-	(27.41)	(76.9)	(1.265)
1002	N. B. SCOFIELD; May 9, 1949; 0407 GCT; 30°58'N, 117°36'W; sounding, 860 fm; wind, 315°, force 3; weather, cloudy; sea, rough; wire angle, 31°.											
0	15.62	33.68	5.54	0.35	0	15.62	33.68	5.54	0.35	24.84	312.3	0.000
8	15.86	33.64	5.63	0.33	10	15.86	33.64	5.61	0.34	24.75	320.6	0.032
20	15.80	33.64	5.58	0.33	20	15.80	33.64	5.58	0.33	24.77	319.6	0.064
40	14.67	33.58	5.68	0.37	30	15.52	33.62	5.63	0.34	24.82	315.4	0.095
58	12.35	33.48	5.31	0.76	50	13.17	33.52	5.50	0.62	25.23	275.9	0.154
75	11.31	33.49	4.51	1.10	75	11.31	33.49	4.51	1.10	25.57	244.7	0.220
110	10.19	33.64	3.38	1.65	100	10.47	33.59	3.70	1.48	25.79	223.5	0.278
147	9.45	34.03	2.26	2.15	150	9.42	34.04	2.25	2.16	26.32	174.4	0.378
222	8.58	34.14	1.64	2.47	200	8.83	34.12	1.81	2.40	26.48	160.2	0.461
297	7.81	34.20	1.05	2.68	250	8.28	34.17	1.42	2.55	26.60	149.2	0.539
452	6.44	34.27	0.50	3.05	300	7.76	34.20	1.02	2.69	26.70	140.0	0.611
549p	5.43[a]	34.25	0.47	3.02r	400	6.86	34.25	0.60	2.95	26.87	125.6	0.744
857p	4.43	34.42	0.46	3.19	500	5.86	34.26	0.49	3.10	27.01	112.5	0.863
					600	5.20	34.26	0.47	3.18	27.09	105.5	0.972
					700	4.87	34.31	0.47	3.19	27.17	98.6	1.074
					800	4.58	34.38	0.46	3.19	27.25	91.0	1.169
					1000	(4.06)	(34.50)	-	-	(27.41)	(77.7)	(1.337)

a) This could also be 5.20° at 573 meters.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	
N. B. SCOFIELD; May 9, 1949; 1023 GCT; 30°38'N, 118°18'W; sounding, 500 fm; wind, 315°, force 4; weather, partly cloudy; sea, rough; wire angle, 0°.													1003
0	15.55	33.60	5.45	0.31	0	15.55	33.60	5.45	0.31	24.80	316.5	0.000	
10	15.64	33.60	4.83	0.31	10	15.64	33.60	4.83	0.31	24.78	318.6	0.032	
25	15.35	33.58	5.56	0.30	20	15.55	33.58	5.45	0.30	24.78	318.4	0.064	
50	15.09	33.58	5.05	0.34	30	15.28	33.58	5.55	0.31	24.84	313.3	0.095	
74	13.20	33.55	4.85	0.43	50	15.09	33.58	5.06	0.34	24.88	310.0	0.158	
98	10.99	33.46	4.56	1.04	75	13.05	33.55	4.83	0.44	25.28	272.0	0.230	
148	9.06	33.80	2.82	1.79	100	10.86	33.46	4.55	1.16	25.62	239.6	0.294	
198	8.24	34.00	2.76	1.99	150	9.00	33.80	2.81	1.80	26.20	185.6	0.401	
298	7.26	34.16	1.26	2.59	200	8.22	34.00	2.75	2.00	26.48	159.9	0.487	
397	6.22	34.18	0.80	2.85	250	7.68	34.13	1.80	2.34	26.66	143.2	0.563	
596	5.44	34.34	0.38	3.12	300	7.24	34.16	1.25	2.59	26.75	135.7	0.632	
896	4.27	34.43	0.46	3.24	400	6.21	34.18	0.78	2.85	26.90	121.9	0.761	
					500	5.81	34.26	0.54	3.03	27.01	112.0	0.878	
					600	5.42	34.35	0.39	3.13	27.13	101.6	0.985	
					700	4.99	34.38	0.36	3.18	27.21	94.9	1.083	
					800	4.62	34.41	0.39	3.22	27.27	89.5	1.175	
					1000	(3.98)	(34.46)	-	-	(27.38)	(79.9)	(1.345)	
N. B. SCOFIELD; May 9, 1949; 1649 GCT; 30°17'N, 118°55'W; sounding, 1,950 fm; wind 315°, force 2; weather, overcast; sea, rough; wire angle, 24°.													1004
0	15.27	33.64	5.43	0.35	0	15.27	33.64	5.43	0.35	24.88	307.9	0.000	
9	15.61	33.60	5.46	0.35	10	15.61	33.60	5.47	0.34	24.78	318.2	0.031	
23	15.64	33.62	5.47	0.34	20	15.64	33.62	5.50	0.34	24.79	317.6	0.063	
45	14.81	33.60	5.75	0.36	30	15.51	33.62	5.55	0.34	24.82	315.1	0.095	
67	13.99	33.55	5.46	0.41	50	14.76	33.59	5.70	0.37	24.96	302.2	0.157	
89	11.87	33.42	5.06	0.81	75	13.26	33.48	5.35	0.49	25.18	281.2	0.229	
132	10.07	33.53	4.29	1.31	100	11.31	33.44	4.85	0.93	25.53	249.0	0.296	
172	9.19	33.78	3.33	1.82	150	9.64	33.64	3.82	1.57	25.97	207.5	0.410	
252	8.01	34.04	2.25	2.28	200	8.76	33.89	2.94	2.00	26.31	175.9	0.506	
332	7.05	34.17	1.14	2.75	250	8.06	34.03	2.30	2.25	26.52	156.1	0.588	
496	6.04	34.31	0.40	3.10	300	7.42	34.12	1.56	2.60	26.69	141.2	0.663	
758	4.47	34.34	0.42	3.28	400	6.54	34.25	0.70	2.94	26.91	121.0	0.794	
1091	3.61	34.51	0.79	3.22	500	6.02	34.31	0.40	3.11	27.02	111.1	0.910	
					600	5.32	34.33	0.35	3.20	27.13	101.8	1.017	
					700	4.73	34.34	0.38	3.26	27.21	94.7	1.115	
					800	4.28	34.35	0.45	3.28	27.26	89.6	1.207	
					1000	3.75	34.46	0.67	3.24	27.40	77.3	1.374	
N. B. SCOFIELD; May 9, 1949; 2212 GCT; 29°53'N, 119°27'W; sounding, 1,950 fm; wind, 315°, force 4; weather, partly cloudy; sea, rough; wire angle, 22°.													1005
0	15.33	33.57	4.67	0.31	0	15.33	33.57	4.67	0.31	24.82	314.1	0.000	
8	15.76	33.49	4.48	0.32	10	15.76	33.49	4.48	0.32	24.66	329.3	0.032	
22	15.48	33.49	4.80	0.28	20	15.49	33.49	4.78	0.29	24.72	323.6	0.065	
45	15.53	33.55	4.76	0.31	30	15.49	33.50	4.80	0.29	24.73	323.4	0.097	
68	15.10	33.60	5.12	0.30	50	15.55	33.65	4.85	0.32	24.83	314.2	0.161	
91	14.02	33.42	4.62	0.30	75	14.81	33.66	5.08	0.31	25.00	298.9	0.238	
134	13.44	33.62	4.53	0.56	100	13.79	33.44	4.58	0.35	25.05	295.1	0.312	
176	10.43	33.58	4.11	1.14	150	12.94	33.61	4.45	0.75	25.35	267.5	0.452	
255	8.42	34.00	2.46	2.01	200	9.46	33.90	3.50	1.64	26.20	186.2	0.566	
334	7.41	34.05	1.92	2.29	250	8.51	34.00	2.52	2.00	26.43	165.0	0.654	
492	6.00	34.20	0.62	2.90	300	7.82	34.03	2.19	2.13	26.56	153.6	0.733	
739	4.76	34.34	0.40	3.18	400	6.68	34.12	1.17	2.62	26.79	132.4	0.876	
1053	3.74	34.49	0.68	-	500	5.93	34.20	0.57	2.92	26.95	118.0	1.001	
					600	5.37	34.27	0.43	3.06	27.08	106.9	1.114	
					700	4.92	34.32	0.39	3.16	27.17	98.5	1.217	
					800	4.53	34.37	0.45	-	27.25	91.2	1.311	
					1000	3.88	34.47	0.62	-	27.40	77.8	1.480	

SIO

CCOFI
4905

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

1006 N. B. SCOFIELD; May 10, 1949; 0410 GCT; 29°30'N, 120°05'W; sounding, 2,050 fm; wind, 315°, force 3; weather, cloudy; sea, rough; wire angle, 22°.

0	17.00	33.74	5.52	0.30	0	17.00	33.74	5.52	0.30	24.57	338.0	0.000
8	16.05	33.64	5.49	0.41	10	16.05	33.64	4.48	0.41	24.71	325.1	0.033
22	16.04	33.64	5.30	0.31	20	16.03	33.64	5.31	0.31	24.72	324.6	0.066
45	16.71	33.62	5.51	0.36	30	16.26	33.64	5.32	0.32	24.66	330.0	0.098
68	14.97	33.66	5.51	0.40	50	16.61	33.62	5.50	0.38	24.57	339.7	0.165
90	14.17	33.46	5.65	0.36	75	14.70	33.62	5.53	0.39	24.99	299.6	0.245
134	12.70	33.48	4.95	0.82	100	13.79	33.45	5.56	0.40	25.05	294.4	0.320
177	10.78	33.66	3.64	1.52	150	11.95	33.53	4.60	1.25	25.48	254.8	0.456
265	8.34	33.96	3.09	1.97	200	10.00	33.83	3.45	1.65	26.06	200.2	0.571
352	7.07	34.02	1.83	2.51	250	8.65	33.94	3.22	1.89	26.37	171.6	0.664
530	5.91	34.22	0.52	3.13	300	7.70	33.98	2.70	2.14	26.54	155.4	0.745
809	4.68	34.41	0.40	3.22	400	6.70	34.07	1.27	2.80	26.75	136.4	0.902
					500	6.10	34.18	0.64	3.09	26.92	121.5	1.031
					600	5.55	34.28	0.42	3.17	27.06	108.4	1.146
					700	5.12	34.35	0.37	3.21	27.17	98.8	1.249
					800	4.73	34.41	0.40	3.22	27.26	90.8	1.344
					1000	(3.98)	(34.50)	-	-	(27.41)	(76.9)	(1.512)

1007 N. B. SCOFIELD; May 10, 1949; 1008 GCT; 29°07'N, 120°45'W; sounding, 2,190 fm; wind, 315°, force 4; weather, overcast; sea, rough; wire angle, 14°.

0	16.28	33.71	4.54	0.28	0	16.28	33.71	4.54	0.28	24.71	324.7	0.000
9	16.35	33.68	4.50	0.28	10	16.35	33.68	4.50	0.28	24.67	328.4	0.033
24	16.34	33.71	4.65	0.31	20	16.35	33.70	4.64	0.31	24.69	327.2	0.065
48	16.05	33.68	4.47	0.32	30	16.34	33.70	4.60	0.32	24.69	327.1	0.098
72	16.14	33.66	4.81	0.30	50	16.07	33.68	4.48	0.32	24.74	323.5	0.163
96	15.19	33.57	5.37	0.33	75	16.15	33.66	4.93	0.31	24.70	327.4	0.245
145	12.48	33.46	4.05	0.84	100	15.00	33.56	5.31	0.34	24.88	310.8	0.324
193	10.37	33.86	2.46	1.89	150	12.13	33.47	3.80	0.90	25.40	262.6	0.467
289	8.98	34.23	1.16	2.49	200	10.27	33.97	2.28	2.00	26.12	194.3	0.582
385	7.64	34.29	0.81	2.71	250	9.50	34.17	1.50	2.34	26.41	168.0	0.673
578	6.08	34.36	0.27	3.10	300	8.83	34.24	1.10	2.52	26.57	153.1	0.752
871	4.67	34.45	0.37	3.17	400	7.50	34.30	0.80	2.75	26.82	130.6	0.894
1214	3.56	34.49	0.84	3.14	500	6.65	34.34	0.42	2.94	26.97	117.2	1.018
					600	5.93	34.37	0.25	3.11	27.09	106.7	1.130
					700	5.38	34.39	0.23	3.16	27.17	99.2	1.233
					800	4.96	34.42	0.30	3.17	27.24	92.7	1.329
					1000	4.20	34.46	0.56	3.16	27.36	82.6	1.504

1008 N. B. SCOFIELD; May 10, 1949; 1508 GCT; 28°50'N, 121°18'W; sounding, 2,300 fm; wind, 315°, force 4; weather, overcast; sea, very rough; wire angle, 20°.

0	17.50	33.69	5.46	0.26	0	17.50	33.69	5.46	0.26	24.41	353.1	0.000
9	16.37	33.68	5.53	0.26	10	16.35	33.68	5.53	0.26	24.67	328.4	0.034
22	16.29	33.69	5.43	0.28	20	16.30	33.69	5.45	0.28	24.69	326.8	0.067
46	15.69	33.73	5.56	0.27	30	16.28	33.70	5.48	0.28	24.71	325.9	0.100
70	15.37	33.58	5.70	0.30	50	15.57	33.73	5.60	0.28	24.89	308.8	0.163
92	12.95	33.57	4.84	0.75	75	15.25	33.58	5.67	0.31	24.84	313.9	0.241
138	10.78	33.82	3.03	1.71	100	12.13	33.58	4.35	0.88	25.48	253.3	0.312
184	9.67	34.07	2.25	2.12	150	10.43	33.97	2.77	1.86	26.10	196.2	0.423
276	8.34	34.18	1.52	2.53	200	9.43	34.09	2.08	2.22	26.36	171.8	0.516
368	7.31	34.29	0.75	2.88	250	8.68	34.15	1.74	2.44	26.52	156.5	0.598
552	6.24	34.36	0.32	3.13	300	8.02	34.21	1.35	2.62	26.67	143.1	0.673
831	4.24	34.42	0.44	3.30	400	7.08	34.31	0.60	2.94	26.89	123.8	0.807
1160	3.66	34.49	0.86	3.21	500	6.58	34.35	0.37	3.08	26.99	115.4	0.926
					600	5.90	34.37	0.28	3.17	27.09	106.3	1.037
					700	5.10	34.39	0.28	3.24	27.20	94.8	1.138
					800	4.40	34.41	0.38	3.29	27.30	86.6	1.228
					1000	4.07	34.46	0.66	3.28	27.37	80.9	1.396

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	µg at/L	m	°C	‰	ml/L	µg at/L	g/L	10^5cm.^{3}/g	dyn. m	
N. B. SCOFIELD; May 10, 1949; 2051 GCT; 28°29'N, 121°52'W; sounding, 2,260 fm; wind, 315°, force 4: weather, overcast; sea, rough; wire angle, 14°.													1009
0	17.40	33.75	4.93	0.32	0	17.40	33.75	4.93	0.32	24.48	346.3	0.000	
9	16.48	33.75	4.90	0.28	10	16.48	33.75	4.88	0.28	24.70	326.1	0.034	
23	16.42	33.69	4.79	0.31	20	16.43	33.70	4.81	0.31	24.67	328.9	0.066	
47	16.06	33.69	5.19	0.28	30	16.35	33.69	4.85	0.31	24.68	328.1	0.099	
71	14.67	33.68	5.65	0.30	50	15.93	33.69	5.28	0.28	24.78	319.6	0.164	
95	13.56	33.68	4.72	0.49	75	14.45	33.68	5.65	0.31	25.09	290.2	0.240	
142	11.04	33.60	-	1.48	100	13.30	33.68	4.58	0.53	25.33	267.9	0.310	
190	9.42	33.93	-	1.77	150	10.63	33.61	3.29	1.57	25.78	226.0	0.433	
282p	8.24	34.09	-	2.15	200	9.26	33.97	2.65	1.81	26.29	177.8	0.535	
516p	6.30	34.28	0.44	2.94	250	8.60	34.05	2.09	2.02	26.46	162.8	0.619	
816p	4.46	34.45	0.42	3.18	300	8.05	34.10	1.60	2.22	26.58	151.7	0.699	
1207p	3.43	34.55	0.73	3.17	400	7.16	34.19	0.86	2.58	26.78	133.8	0.840	
					500	6.40	34.27	0.45	2.89	26.95	118.9	0.967	
					600	5.72	34.34	0.43	3.07	27.09	106.4	1.080	
					700	5.10	34.40	0.42	3.14	27.21	94.6	1.180	
					800	4.53	34.45	0.42	3.17	27.32	85.1	1.270	
					1000	3.90	34.50	0.52	3.18	27.42	76.0	1.432	
N. B. SCOFIELD; May 11, 1949; 0218 GCT; 28°09'N, 122°26'W; sounding, 2,340 fm; wind, 315°, force 3; weather, overcast; sea, rough; wire angle, 15°.													1010
0	16.72	33.68	5.47	0.42	0	16.72	33.68	5.47	0.42	24.58	335.8	0.000	
9	16.25	33.69	6.08r	0.45	10	16.25	33.69	5.48	0.45	24.70	325.5	0.033	
23	16.21	33.64	5.48	0.42	20	16.22	33.64	5.48	0.43	24.68	328.4	0.066	
47	15.67	33.64	5.56	0.45	30	16.18	33.64	5.52	0.43	24.68	328.3	0.099	
70	14.20	33.53	5.59	0.49	50	15.50	33.64	5.57	0.46	24.84	314.0	0.163	
93	13.66	33.44	5.70	0.49	75	14.00	33.50	5.61	0.50	25.05	294.4	0.239	
139	11.95	33.48	4.92	1.03	100	13.50	33.44	5.65	0.50	25.10	289.4	0.312	
184	9.51	33.65	3.78	1.73	150	11.00	33.51	4.67	1.24	25.64	239.6	0.444	
276	8.82	34.09	2.11	2.42	200	9.40	33.75	3.27	1.90	26.10	196.5	0.553	
369	7.08	34.04	1.58	2.73	250	9.07	34.03	2.37	2.28	26.37	171.3	0.645	
556	5.58	34.23	0.54	3.18	300	8.42	34.08	2.00	2.51	26.51	158.7	0.728	
840	4.35	34.40	0.52	3.33	400	6.78	34.04	1.33	2.82	26.71	139.8	0.876	
1178	3.47	34.52	0.88	3.29	500	5.93	34.17	0.72	3.06	26.93	120.2	1.007	
					600	5.35	34.26	0.46	3.25	27.07	107.4	1.120	
					700	4.90	34.33	0.42	3.33	27.18	97.5	1.223	
					800	4.50	34.38	0.46	3.34	27.26	90.0	1.316	
					1000	3.84	34.42	0.69	3.32	27.36	81.2	1.488	
N. B. SCOFIELD; May 11, 1949; 0732 GCT; 27°50'N, 122°59'W; sounding, 2,300 fm; wind, 315°, force 3; weather, overcast; sea, rough; wire angle, 15°.													1011
0	16.50	33.95	4.66	0.36	0	16.50	33.95	4.66	0.36	24.85	311.5	0.000	
10	16.81	33.92	4.75	0.39	10	16.81	33.92	4.75	0.39	24.75	320.7	0.032	
24	16.81	33.93	5.03	0.35	20	16.83	33.93	4.97	0.36	24.75	320.9	0.064	
48	16.93	34.02	5.16	0.37	30	16.86	33.96	5.10	0.35	24.77	319.7	0.096	
71	15.88	33.84	5.35	0.36	50	16.95	34.02	5.19	0.38	24.79	318.0	0.160	
95	15.91	33.96	5.07	0.34	75	15.90	33.84	5.40	0.36	24.90	308.7	0.238	
143	14.91	33.93	4.70	0.46	100	15.87	33.96	5.00	0.34	25.00	300.0	0.314	
190	10.23	33.69	3.89	1.35	150	13.71	33.92	4.60	0.52	25.43	259.7	0.453	
286	8.30	34.02	2.35	2.22	200	10.00	33.70	3.67	1.46	25.96	209.8	0.572	
381	7.03	34.11	1.47	2.68	250	9.10	33.96	2.80	1.97	26.31	176.9	0.668	
573	5.77	34.31	0.45	3.18	300	8.03	34.04	2.20	2.31	26.54	155.7	0.752	
863	4.64	34.45	0.41	3.35	400	6.87	34.13	1.32	2.76	26.77	134.4	0.896	
1207	3.58	34.52	0.82	3.26	500	6.17	34.24	0.71	3.04	26.95	118.1	1.022	
					600	5.64	34.33	0.42	3.22	27.09	106.1	1.134	
					700	5.18	34.39	0.34	3.31	27.19	96.5	1.236	
					800	4.85	34.43	0.37	3.34	27.26	90.7	1.329	
					1000	4.17	34.48	0.60	3.33	27.38	80.6	1.501	

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

1101 N. B. SCOFIELD; May 8, 1949; 0817 GCT; 29°30'N, 116°08'W; sounding, 550 fm; wind, 280°, force 2; weather, fog in patches; sea, moderate; wire angle, 32°.

0	15.50	33.62	5.48	0.38	0	15.50	33.62	5.48	0.38	24.82	314.1	0.000
8	15.51	33.66	5.62	0.32	10	15.50	33.66	5.62	0.32	24.85	311.4	0.031
21	15.16	33.58	5.53	0.32	20	15.15	33.58	5.56	0.32	24.86	310.4	0.062
41	14.32	33.55	5.75	0.36	30	14.85	33.56	5.56	0.34	24.91	305.9	0.093
60	13.22	33.48	5.64	0.43	50	13.93	33.53	5.74	0.38	25.09	290.0	0.153
79	11.54	33.48	4.82	0.97	75	11.83	33.47	5.20	0.68	25.45	255.4	0.221
114	9.91	33.82	2.88	1.84	100	10.43	33.73	3.27	1.69	25.91	212.7	0.280
149	9.06	34.02	2.74	2.07	150	9.05	34.02	2.75	2.08	26.36	170.1	0.375
220	8.81	34.16	1.45	2.41	200	8.85	34.12	1.67	2.30	26.47	160.6	0.458
291	8.19	34.29	0.93	2.76	250	8.63	34.24	1.20	2.58	26.60	149.1	0.536
434	6.85	34.27	0.51	3.04	300	8.07	34.29	0.90	2.79	26.72	138.2	0.607
706	5.18	34.34	0.59	3.12	400	7.13	34.27	0.58	3.00	26.85	127.5	0.740
					500	6.40	34.28	0.42	3.09	26.96	118.2	0.863
					600	5.78	34.31	0.42	3.13	27.06	109.3	0.977
					700	5.22	34.34	0.57	3.12	27.15	101.2	1.082
					800	(4.73)	(34.38)	–	–	(27.24)	(92.8)	(1.179)
					1000	(4.00)	(34.44)	–	–	(27.36)	(81.6)	(1.353)

1102 N. B. SCOFIELD; May 8, 1949; 0150 GCT; 29°09'N, 116°43'W; sounding, 1,550 fm; wind, 315°, force 3; weather, overcast; sea, moderate; wire angle, 6°.

0	15.72	33.64	4.82	0.40	0	15.72	33.64	4.82	0.40	24.79	316.9	0.000
10	15.84	33.62	4.89	0.31	10	15.84	33.62	4.89	0.31	24.75	320.6	0.032
24	15.21	33.64	5.11	0.33	20	15.43	33.63	5.08	0.32	24.84	312.5	0.064
48	14.00	33.51	5.25	0.31	30	15.00	33.64	5.18	0.33	24.94	303.2	0.094
71	11.93	33.39	4.92	0.73	50	13.90	33.49	5.25	0.34	25.06	292.3	0.154
94	10.93	33.44	4.05	1.11	75	11.76	33.39	4.83	0.78	25.40	280.2	0.223
141	10.03	33.89	2.51	1.84	100	10.77	33.50	3.78	1.20	25.67	235.6	0.285
187	9.58	34.16	1.65	2.27	150	9.90	33.96	2.15	2.00	26.18	188.0	0.391
279	7.62	34.14	1.44	2.53	200	9.47	34.16	1.63	2.31	26.40	167.4	0.479
371	6.78	34.20	0.86	2.77	250	8.25	34.14	1.54	2.47	26.58	151.0	0.560
556	5.35	34.27	0.37	3.13	300	7.40	34.15	1.34	2.58	26.72	138.7	0.632
836	4.42	34.42	0.47	3.18	400	6.50	34.21	0.73	2.87	26.89	123.4	0.763
1183	3.49	34.51	0.79	3.17	500	5.67	34.24	0.46	3.07	27.01	111.9	0.880
					600	5.17	34.30	0.38	3.15	27.12	102.2	0.987
					700	4.82	34.36	0.39	3.18	27.21	94.3	1.086
					800	4.50	34.41	0.44	3.18	27.29	87.7	1.177
					1000	3.95	34.47	0.61	3.18	27.39	78.8	1.343

1103 N. B. SCOFIELD; May 7, 1949; 1946 GCT; 28°47'N, 117°21'W; sounding, 1,900 fm; wind, 192°, force 2; weather, cloudy; sea, moderate; wire angle, 11°.

0	16.00	33.75	5.46	0.37	0	16.00	33.75	5.46	0.37	24.81	315.5	0.000
9	16.34	33.66	5.54	0.37	10	16.35	33.66	5.55	0.37	24.66	330.0	0.032
23	15.98	33.64	5.50	0.33	20	16.02	33.64	5.53	0.33	24.72	324.7	0.065
46	15.92	33.66	5.54	0.32	30	15.95	33.65	5.52	0.32	24.74	322.5	0.097
69	14.89	33.66	5.54	0.35	50	15.76	33.66	5.55	0.32	24.79	318.3	0.162
92	14.14	33.58	5.45	0.36	75	14.69	33.65	5.53	0.35	25.02	297.3	0.238
137	11.82	33.53	4.38	1.15	100	13.72	33.57	5.34	0.40	25.16	284.2	0.311
182	10.30	33.87	2.69	1.97	150	11.45	33.54	3.33	1.64	25.59	245.3	0.444
272	8.39	34.05	2.42	2.21	200	9.65	33.95	2.59	2.04	26.21	185.5	0.551
362	7.63	34.25	1.02	2.82	250	8.70	34.02	2.57	2.16	26.42	166.5	0.639
544	6.21	34.31	0.40	3.18	300	8.17	34.11	2.12	2.30	26.57	152.9	0.719
824	4.60	34.43	0.41	3.42	400	7.30	34.27	0.72	2.93	26.82	130.0	0.860
1164	3.50	34.51	0.84	3.29	500	6.55	34.29	0.45	3.12	26.94	119.5	0.985
					600	5.82	34.33	0.35	3.25	27.07	108.4	1.099
					700	5.20	34.38	0.35	3.35	27.18	97.6	1.202
					800	4.70	34.42	0.38	3.40	27.27	89.5	1.295
					1000	3.98	34.48	0.60	3.38	27.40	78.3	1.463

OBSERVED					INTERPOLATED					COMPUTED			
Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m	

N. B. SCOFIELD; May 7, 1949; 1400 GCT; 28°26'N, 117°58'W; sounding, 1,820 fm; wind, 240°, force 1; weather, partly cloudy; sea, moderate; wire angle, 3°. 1104

0	16.21	33.66	4.90	0.34	0	16.21	33.66	4.90	0.34	24.69	326.3	0.000	
10	16.08	33.64	4.79	0.27	10	16.08	33.64	4.79	0.27	24.70	325.5	0.033	
25	15.83	33.62	4.91	0.26	20	15.92	33.62	4.89	0.26	24.73	323.7	0.065	
50	15.29	33.66	4.89	0.27	30	15.70	33.62	4.90	0.26	24.78	319.2	0.097	
75	14.82	33.68	5.20	0.30	50	15.29	33.66	4.89	0.27	24.89	308.5	0.160	
100	14.12	33.60	5.13	0.33	75	14.82	33.68	5.20	0.30	25.02	297.5	0.236	
150	11.14	33.62	3.57	1.36	100	14.12	33.60	5.13	0.33	25.10	290.0	0.309	
200	10.03	34.02	2.22	2.01	150	11.14	33.62	3.57	1.36	25.70	234.0	0.441	
300	9.06	34.33	0.97	2.60	200	10.03	34.02	2.22	2.01	26.20	186.6	0.546	
400	7.91	34.36	0.47	2.85	250	9.65	34.25	1.49	2.37	26.45	164.6	0.633	
600	6.03	34.38	0.38	2.99	300	9.06	34.33	0.97	2.60	26.61	150.0	0.712	
900	4.42	34.45	0.45	3.19	400	7.91	34.36	0.47	2.85	26.81	132.0	0.852	
1250	3.49	34.47	0.76	3.14	500	6.85	34.36	0.40	2.92	26.96	118.4	0.978	
					600	6.03	34.38	0.38	2.99	27.08	107.4	1.090	
					700	5.45	34.41	0.40	3.08	27.18	98.7	1.193	
					800	4.90	34.43	0.42	3.15	27.26	91.4	1.288	
					1000	4.05	34.46	0.53	3.19	27.37	80.7	1.460	

SCOFIELD; May 5, 1949; 1810 GCT; 28°04'N, 118°38'W; sounding, 2110 fm; wind, 292°, force 4; weather, cloudy; sea, high, wire angle, 17°. 1105

0	16.11	33.69	5.55	0.39	0	16.11	33.69	5.55	0.39	24.73	322.4	0.000	
10	16.02	33.64	5.52	0.33	10	16.02	33.64	5.52	0.33	24.72	324.3	0.032	
24	15.98	33.66	5.82	0.34	20	16.02	33.66	5.78	0.34	24.73	322.9	0.065	
70[a)]	14.52	33.57	5.82r	0.37r	30	15.88	33.65	5.84	0.35	24.76	321.0	0.097	
71	14.51	33.55	5.63	0.36	50	15.35	33.61	5.80	0.36	24.85	313.3	0.160	
94	13.20	33.48	5.45	0.51	75	14.43	33.53	5.58	0.38	24.98	300.9	0.237	
140	10.62	33.73	3.45	1.57	100	12.63	33.48	5.36	0.60	25.31	270.0	0.308	
184	9.94	34.05	2.28	2.16	150	10.42	33.84	2.98	1.71	26.00	205.5	0.428	
272	9.17	34.25	1.36	2.57	200	9.80	34.10	2.05	2.26	26.30	177.0	0.523	
359	8.12	34.34	0.77	2.89	250	9.37	34.22	1.54	2.49	26.47	162.3	0.607	
536	6.51	34.43	0.32	3.12	300	8.82	34.28	1.12	2.69	26.61	149.9	0.686	
804	4.82	34.42	0.43	3.27	400	7.70	34.38	0.59	2.97	26.85	127.7	0.824	
1125	3.78	34.51	0.77	3.28	500	6.83	34.42	0.35	3.09	27.01	113.8	0.945	
					600	6.05	34.43	0.32	3.18	27.12	103.9	1.055	
					700	5.37	34.42	0.35	3.24	27.19	96.9	1.154	
					800	4.85	34.42	0.40	3.27	27.26	91.5	1.249	
					1000	4.05	34.47	0.60	3.28	27.38	80.0	1.401	

N. B. SCOFIELD; May 5, 1949; 1125 GCT; 27°41'N, 119°15'W; sounding, 1,150 fm; wind, 315°, force 4; weather, partly cloudy; sea, rough; wire angle, 18°. 1106

0	16.55	33.79	4.59	0.34	0	16.55	33.79	4.59	0.34	24.71	324.2	0.000	
9	16.40	33.77	5.03	0.30	10	16.40	33.77	5.02	0.30	24.73	322.9	0.032	
23	16.42	33.78	4.69	0.32	20	16.40	33.78	4.72	0.32	24.74	322.4	0.065	
46	16.39	33.78	5.13	0.28	30	16.40	33.79	4.84	0.32	24.75	322.0	0.097	
68	15.07	33.69	5.25	0.26	50	16.35	33.77	5.16	0.28	24.74	322.9	0.161	
90	13.35	33.57	5.05	0.53	75	14.60	33.62	5.22	0.28	25.01	297.8	0.239	
135	10.26	33.53	3.75	1.29	100	12.50	33.55	4.85	0.76	25.39	262.4	0.309	
180	9.70	33.95	2.50	1.83	150	10.07	33.59	3.25	1.52	25.86	218.2	0.430	
271	8.62	34.25	1.20	2.42	200	9.45	34.05	2.14	1.98	26.32	175.1	0.528	
361	7.68	34.39	0.56	2.78	250	8.85	34.20	1.43	2.31	26.54	155.5	0.610	
545	6.32	34.37	0.40	3.01	300	8.30	34.28	0.94	2.55	26.68	142.3	0.685	
822	4.69	34.45	0.36	3.17	400	7.35	34.34	0.48	2.84	26.87	125.4	0.818	
1155	3.74	34.54	0.71	3.16	500	6.63	34.36	0.40	2.96	26.99	115.4	0.939	
					600	5.97	34.38	0.35	3.06	27.09	106.4	1.050	
					700	5.35	34.41	0.35	3.12	27.19	97.2	1.151	
					800	4.82	34.44	0.37	3.16	27.27	89.6	1.245	
					1000	4.02	34.50	0.52	3.19	27.41	77.3	1.412	

a) Nansen bottle slipped down to next one.

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4905

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
1107	N. B. SCOFIELD; May 5, 1949; 0505 GCT; 27°19'N, 119°54'W; sounding, 2,180 fm; wind, 315°, force 4; weather, cloudy; sea, very rough; wire angle, 16°.											
0	16.75	33.87	5.39		0	16.75	33.87	5.39		24.73	323.0	0.000
10	16.75	33.82	5.45		10	16.75	33.82	5.45		24.69	327.0	0.032
24	16.74	33.82	5.42		20	16.75	33.82	5.43		24.69	327.2	0.065
47	15.30	33.68	5.54		30	16.71	33.82	5.45		24.70	326.7	0.098
70	14.90	33.71	5.45		50	15.18	33.68	5.54		24.94	304.4	0.161
94	13.91	33.53	5.58		75	14.88	33.71	5.47		25.02	296.7	0.236
140	10.62	33.53	4.48		100	13.35	33.52	5.53		25.20	280.8	0.308
185	9.38	33.84	3.40		150	10.33	33.56	4.20		25.79	224.5	0.435
279	7.82	34.09	2.45		200	9.04	33.88	3.25		26.26	181.0	0.536
373	7.43	34.27	0.92		250	8.07	34.01	2.78		26.51	157.9	0.621
563	5.89	34.40	0.38		300	7.75	34.14	2.07		26.66	144.4	0.697
649p	5.33[a]	34.31r	0.45		400	7.24	34.30	0.77		26.86	126.9	0.831
1027p	4.08	34.51	0.76		500	6.39	34.37	0.45		27.03	111.4	0.951
					600	5.64	34.41	0.40		27.15	100.1	1.057
					700	5.10	34.44	0.46		27.24	91.9	1.152
					800	4.74	34.47	0.53		27.31	86.3	1.242
					1000	4.16	34.51	0.74		27.40	78.2	1.406
1108	N. B. SCOFIELD; May 4, 1949; 2226 GCT; 26°57'N, 120°32'W; sounding, 2,270 fm; wind, 315°, force 5; weather, cloudy; sea, high; wire angle, 15°.											
0	16.65	33.80	4.92	0.35	0	16.65	33.80	4.92	0.35	24.70	325.8	0.000
10	16.51	33.78	4.32	0.27	10	16.51	33.78	4.32	0.27	24.72	324.3	0.032
25	16.50	33.78	4.63	0.27	20	16.50	33.78	4.50	0.26	24.72	324.6	0.065
48	16.34	33.75	5.04	0.31	30	16.50	33.78	4.85	0.28	24.72	324.9	0.097
72	15.60	33.78	4.60	0.23	50	16.21	33.75	5.03	0.31	24.76	321.1	0.162
89p	15.30	33.71	5.07	0.25	75	15.56	33.78	4.59	0.23	24.93	305.8	0.240
117p	13.63	33.51	4.80	0.44	100	14.98	33.58	5.05	0.30	24.90	309.1	0.317
146p	10.56	33.55	3.80	1.24	150	10.45	33.56	3.74	1.30	25.77	226.6	0.452
279	8.59	34.09	1.80	2.32	200	9.55	33.77	2.88	1.81	26.09	197.3	0.557
370	7.73	34.25	0.94	2.63	250	8.95	34.00	2.16	2.16	26.36	171.9	0.649
554	5.95	34.33	0.53	3.05	300	8.40	34.15	1.56	2.40	26.57	153.3	0.730
832	4.64	34.43	0.40	3.22	400	7.43	34.27	0.84	2.72	26.81	131.7	0.873
1174	3.55	34.52	0.77	3.17	500	6.43	34.31	0.60	2.94	26.97	116.5	0.997
					600	5.68	34.35	0.49	3.11	27.10	105.0	1.108
					700	5.19	34.39	0.41	3.19	27.19	96.7	1.209
					800	4.77	34.42	0.40	3.22	27.26	90.5	1.302
					1000	4.07	34.48	0.54	3.21	27.39	79.3	1.472
1109	N. B. SCOFIELD; May 4, 1949; 1600 GCT; 26°34'N, 121°11'W; sounding, 2,160 fm; wind, 315°, force 5; weather, overcast; sea, very rough; wire angle, 18°.											
0	16.77	34.04	5.20	0.48	0	16.77	34.04	5.20	0.48	24.85	311.2	0.000
9	16.76	33.93	5.33	0.44	10	16.75	33.93	5.33	0.44	24.77	319.0	0.032
23	16.72	33.89	5.34	0.44	20	16.73	33.90	5.33	0.44	24.76	320.8	0.064
46	15.98	33.84	5.45	0.47	30	16.58	33.87	5.36	0.44	24.76	320.1	0.096
70	15.26	33.68	5.53	0.46	50	15.83	33.83	5.50	0.47	24.91	307.2	0.158
94	14.83	33.62	5.51	0.44	75	15.13	33.67	5.55	0.45	24.94	304.7	0.235
140	13.73	33.58	5.30	0.60	100	14.77	33.61	5.51	0.46	24.97	302.5	0.311
187	10.12	33.86	2.68	2.14	150	12.50	33.61	4.92	1.30	25.43	259.2	0.452
281	9.46	34.25	1.12	2.67	200	10.02	33.93	2.25	2.26	26.13	193.2	0.565
375	8.45	34.33	0.98	2.86	250	9.71	34.17	1.43	2.56	26.37	171.6	0.655
563	6.29	34.27	0.48	3.22	300	9.26	34.18	1.05	2.71	26.45	164.5	0.739
844	4.68	34.45	0.43	3.36	400	8.13	34.32	0.92	2.90	26.74	138.4	0.891
1178	3.52	34.45	0.90	3.26	500	6.80	34.28	0.66	3.10	26.90	123.7	1.022
					600	6.07	34.30	0.43	3.27	27.01	113.7	1.141
					700	5.47	34.37	0.38	3.35	27.14	102.1	1.249
					800	4.92	34.44	0.40	3.36	27.26	90.7	1.345
					1000	4.00	34.45	0.62	3.33	27.37	80.8	1.517

a) Middle thermometer reading of 4.95° rejected.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	µg at/L	m	°C	‰	ml/L	µg at/L	g/L	10^5 cm^3/g	cyn. m	

N. B. SCOFIELD; May 4, 1949; 0910 GCT; 26°12'N, 121°46'W; sounding, 1,750 fm; wind, 315°, force 5; weather, cloudy; sea, very rough; wire angle, 13°. 1110

0	17.10	33.86	4.83	0.57	0	17.10	33.86	4.83	0.57	24.64	331.6	0.000	
9	17.08	33.91	4.63	0.40	10	17.07	33.91	4.64	0.40	24.68	327.6	0.033	
23	17.07	33.82	4.76	0.44	20	17.06	33.83	4.72	0.44	24.62	333.7	0.066	
47	16.81	33.80	5.40	0.40	30	17.02	33.81	4.90	0.44	24.62	334.2	0.099	
70	15.80	33.80	4.99	0.42	50	16.70	33.80	5.38	0.40	24.68	328.4	0.166	
94	15.39	33.71	5.07	0.42	75	15.64	33.79	4.98	0.42	24.92	306.7	0.245	
141	13.24	33.62	4.26	0.85	100	15.32	33.70	5.00	0.44	24.92	307.2	0.322	
188	9.83	33.73	3.14	1.74	150	11.77	33.62	4.00	1.06	25.58	245.2	0.459	
283	8.52	34.13	1.94	2.38	200	9.67	33.79	2.97	1.86	26.08	197.9	0.571	
377	7.08	34.18	1.20	2.76	250	8.98	34.09	2.28	2.20	26.43	165.7	0.662	
566	5.81	34.31	0.36	3.21	300	8.23	34.14	1.78	2.44	26.59	151.6	0.741	
614p	5.50	34.31	0.36	3.20	400	6.86	34.22	1.05	2.85	26.84	127.6	0.880	
1016p	4.14	34.49	0.70	3.33	500	6.15	34.30	0.53	3.13	27.00	113.3	1.001	
					600	5.60	34.31	0.36	3.20	27.08	106.9	1.111	
					700	5.11	34.32	0.40	3.22	27.15	101.0	1.215	
					800	4.76	34.36	0.46	3.25	27.22	94.5	1.312	
					1000	4.16	34.48	0.65	3.32	27.38	80.4	1.487	

N. B. SCOFIELD; May 4, 1949; 0240 GCT; 25°51'N, 122°23'W; sounding, 2,120 fm; wind, 337°, force 5; weather, cloudy; sea, rough; wire angle, 21°. 1111

0	17.60	34.02	5.40	0.44	0	17.60	34.02	5.40	0.44	24.64	331.4	0.000	
9	17.58	33.91	5.31	0.42	10	17.57	33.91	5.31	0.42	24.56	339.1	0.034	
22	17.56	33.96	5.39	0.41	20	17.56	33.96	5.40	0.41	24.60	335.6	0.067	
45	17.20	34.04	5.43	0.39	30	17.45	34.00	5.42	0.40	24.66	330.4	0.101	
68	16.76	34.00	5.40	0.39	50	17.11	34.04	5.42	0.39	24.77	320.2	0.166	
91	16.49	33.98	5.44	0.38	75	16.65	34.00	5.42	0.38	24.85	313.5	0.245	
137	15.54	33.78	5.26	0.42	100	16.41	33.97	5.43	0.38	24.88	311.0	0.323	
183	12.31	33.51	4.61	1.06	150	14.67	33.60	5.14	0.50	24.98	302.7	0.476	
275	8.44	34.00	3.11	1.99	200	11.22	33.53	4.33	1.27	25.61	243.1	0.612	
366	7.27	34.09	1.84	2.57	250	8.85	33.93	3.50	1.78	26.33	175.5	0.718	
550	5.79	34.29	0.46	3.21	300	8.10	34.03	2.72	2.17	26.52	157.6	0.801	
828	4.62	34.52	0.52	3.33	400	6.90	34.14	1.45	2.75	26.78	134.1	0.947	
1164	3.70	34.47	0.86	3.36	500	6.05	34.25	0.63	3.12	26.98	115.8	1.072	
					600	5.55	34.32	0.42	3.25	27.09	105.5	1.182	
					700	5.13	34.37	0.43	3.31	27.18	97.3	1.283	
					800	4.72	34.41	0.51	3.33	27.26	90.6	1.378	
					1000	4.00	34.45	0.70	3.35	27.37	80.8	1.549	

N. B. SCOFIELD; May 1, 1949; 0229 GCT; 27°29'N, 115°20'W; sounding, 1,650 fm; wind, 270°, force 4; weather, overcast; sea, very rough; wire angle, 28°. 1201

0	14.48	33.75	6.04	0.72	0	14.48	33.75	6.04	0.72	25.14	283.2	0.000	
8	13.66	33.75	5.82	0.75	10	13.58	33.75	5.75	0.77	25.33	265.8	0.028	
21	13.03	33.84	4.54	1.32	20	13.04	33.84	4.60	1.23	25.51	249.3	0.053	
43	12.08	33.75	3.84	1.54	30	12.62	33.83	4.25	1.68	25.58	242.4	0.078	
65	11.14	33.89	2.57	2.10	50	11.70	33.76	3.50	1.96	25.70	231.1	0.125	
86	10.95	34.14	1.64	2.29	75	11.04	34.10	1.90	2.20	26.09	195.2	0.178	
126	10.78	34.23	1.29	2.40	100	10.89	34.15	1.50	2.33	26.15	189.3	0.226	
165	10.23	34.42	0.67	2.71	150	10.44	34.38	0.90	2.57	26.41	165.9	0.315	
243	9.25	34.45	0.39	2.87	200	9.79	34.45	0.49	2.81	26.58	150.9	0.395	
320	8.80	34.40	0.40	2.94	250	9.21	34.45	0.39	2.88	26.68	142.7	0.468	
475	7.25	34.42	0.24	3.08	300	8.95	34.41	0.40	2.92	26.68	142.4	0.540	
707	5.21	34.42	0.31	3.30	400	8.00	34.41	0.31	3.00	26.83	129.7	0.675	
1008	3.96	34.45	0.63	3.19	500	7.01	34.42	0.23	3.12	26.98	116.2	0.798	
					600	6.05	34.42	0.24	3.24	27.11	104.8	0.909	
					700	5.26	34.42	0.30	3.30	27.21	95.5	1.009	
					800	4.71	34.43	0.38	3.29	27.28	89.0	1.101	
					1000	3.98	34.45	0.63	3.19	27.37	80.6	1.271	

SIO

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4905

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
1202	N. B. SCOFIELD; May 1, 1949; 0832 GCT; 27°05'N, 115°54'W; sounding, 1,980 fm; wind, 270°, force 3; weather, overcast; sea, very rough; wire angle, 15°.											
0	15.92	33.55	4.79	0.38	0	15.92	33.55	4.79	0.38	24.67	328.2	0.000
9	15.30	33.57	4.37	0.42	10	15.30	33.57	5.37	0.42	24.82	314.0	0.032
23	15.30	33.53	5.31	0.47	20	15.29	33.53	5.35	0.47	24.80	316.8	0.064
48	14.31	33.51	5.63	0.47	30	15.25	33.52	5.42	0.47	24.80	317.2	0.095
72	11.82	33.40	4.77	1.04	50	14.25	33.50	5.62	0.47	25.00	298.4	0.157
96	10.53	33.58	3.82	1.60	75	11.40	33.40	4.71	1.20	25.48	253.1	0.226
144	10.84	34.33	1.35	2.44	100	10.54	33.76	3.63	1.66	25.91	212.2	0.284
193	10.84	34.45	1.11	2.57	150	10.85	34.36	1.30	2.47	26.32	174.3	0.381
290	9.62	34.36	0.53	2.80	200	10.84	34.45	1.07	2.59	26.40	168.7	0.466
386	8.14	-	0.29	2.99	250	10.39	34.41	0.77	2.71	26.45	164.8	0.550
581	6.15	34.36	0.32	3.25	300	9.46	34.36	0.50	2.82	26.56	154.2	0.630
874	4.53	34.45	0.42	3.33	400	7.97	34.36	0.28	3.02	26.80	132.9	0.773
1220	3.46	34.49	0.84	3.25	500	6.86	34.36	0.31	3.18	26.96	118.4	0.899
					600	6.03	34.37	0.31	3.26	27.07	108.2	1.012
					700	5.44	34.39	0.33	3.30	27.16	100.1	1.116
					800	4.90	34.42	0.38	3.32	27.25	92.0	1.212
					1000	3.98	34.47	0.55	3.31	27.39	79.2	1.383
1203	N. B. SCOFIELD; May 1, 1949; 1442 GCT; 26°39'N, 116°29'W; sounding, 2,160 fm; wind, 270°, force 3; weather, overcast; sea, very rough; wire angle, 25°.											
0	17.12	33.75	5.45	0.45	0	17.12	33.75	5.45	0.45	24.55	340.2	0.000
8	16.49	33.73	5.57	0.43	10	16.49	33.73	5.57	0.43	24.68	327.6	0.033
21	16.46	33.75	5.48	0.48	20	16.47	33.75	5.49	0.48	24.70	326.2	0.066
43	15.20	33.58	5.80	0.44	30	16.42	33.72	5.55	0.48	24.69	327.7	0.099
64	14.55	33.57	5.74	0.48	50	14.95	33.57	5.80	0.44	24.90	307.7	0.162
85	13.94	33.58	5.43	0.63	75	14.27	33.57	5.62	0.55	25.05	294.3	0.238
126	11.22	33.53	4.02	1.36	100	12.97	33.57	5.04	0.77	25.31	269.7	0.308
167	10.21	33.98	2.48	1.74	150	10.52	33.73	2.90	1.63	25.89	215.2	0.430
249	9.12	34.22	1.48	2.44	200	9.73	34.09	2.00	2.00	26.31	176.6	0.527
331	8.48	34.36	0.62	2.96	250	9.11	34.22	1.46	2.47	26.51	158.2	0.611
494	6.62	34.34	0.46	3.17	300	8.74	34.33	0.88	2.86	26.66	145.1	0.687
741p	5.12	34.42	0.36	3.42	400	7.63	34.36	0.50	3.09	26.85	127.9	0.823
					500	6.58	34.34	0.45	3.18	26.98	115.9	0.945
					600	5.91	34.36	0.40	3.28	27.08	107.2	1.057
					700	5.34	34.40	0.37	3.39	27.18	97.9	1.159
					800	(4.86)	(34.44)	-	-	(27.27)	(90.1)	(1.254)
					1000	(4.00)	(34.47)	-	-	(27.39)	(79.4)	(1.423)
1204	N. B. SCOFIELD; May 1, 1949; 2131 GCT; 26°10'N, 117°02'W; sounding, 2,120 fm; wind, 270°, force 3; weather, cloudy; sea, very rough; wire angle, 12°.											
0	18.61	34.07	4.82	0.45	0	18.61	34.07	4.82	0.45	24.43	351.2	0.000
10	17.86	34.09	4.96	0.46	10	17.86	34.09	4.96	0.46	24.63	332.3	0.034
24	17.72	34.11	4.93	0.43	20	17.72	34.11	4.93	0.44	24.68	328.1	0.067
48	17.70	34.13	5.40	0.44	30	17.71	34.12	4.95	0.43	24.69	327.4	0.100
71	16.36	33.89	5.43	0.45	50	17.70	34.13	5.40	0.44	24.70	327.1	0.166
78p	15.52	33.78	5.48	0.47	75	16.00	33.79	5.45	0.46	24.84	314.5	0.246
143	11.84	33.86	2.54	1.83	100	13.90	33.78	4.86	0.74	25.29	272.4	0.319
190	10.47	34.20	1.62	2.40	150	11.50	33.90	2.37	1.94	25.85	219.6	0.442
285	9.20[a]	34.36	0.82	2.81	200	10.30	34.23	1.51	2.46	26.32	175.7	0.541
381	8.16	34.45	0.41	3.10	250	9.61	34.32	1.05	2.70	26.51	158.7	0.624
573	6.48	34.38	0.36	3.34	300	9.02	34.38	0.75	2.88	26.65	145.8	0.701
864	4.71	34.49	0.45	3.40	400	7.97	34.45	0.41	3.13	26.87	126.2	0.836
1208	3.69	34.52	0.72	3.39	500	7.06	34.38	0.38	3.27	26.94	119.7	0.959
					600	6.28	34.39	0.36	3.36	27.05	110.1	1.074
					700	5.61	34.43	0.37	3.40	27.17	99.3	1.179
					800	5.03	34.46	0.41	3.41	27.27	90.6	1.273
					1000	4.19	34.51	0.54	3.39	27.40	78.5	1.443

a) Left thermometer reading of 9.05° rejected.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

N. B. SCOFIELD; May 2, 1949; 0324 GCT; 25°49'N, 117°38'W; sounding, 2,200 fm; wind, 270°, force 2; weather, overcast; sea, very rough; wire angle, 8°. 1205

0	18.25	34.20	5.29	0.64	0	18.25	34.20	5.29	0.64	24.62	333.6	0.000
10	18.14	34.16	5.29	0.49	10	18.14	34.16	5.29	0.49	24.61	334.3	0.033
25	18.10	34.13	5.22	0.49	20	18.12	34.14	5.24	0.49	24.58	337.8	0.067
50	16.98	33.98	5.48	0.52	30	18.07	34.11	5.26	0.50	24.59	336.5	0.101
74	15.64	33.82	5.59	0.50	50	16.98	33.98	5.48	0.52	24.76	322.6	0.167
99	14.22	33.89	5.22	0.73	75	15.57	33.82	5.58	0.51	24.96	303.0	0.245
148	10.44	33.91	3.12	1.85	100	14.10	33.89	5.15	0.73	25.33	268.2	0.316
198	9.68	34.13	2.18	2.31	150	10.36	33.91	3.08	1.86	26.06	199.1	0.433
297	9.13	34.42	0.70	2.96	200	9.65	34.14	2.14	2.32	26.36	171.5	0.526
396	8.20	34.47	0.41	3.18	250	9.38	34.31	1.15	2.72	26.54	155.6	0.607
594	6.38	34.43	0.27	3.44	300	9.12	34.43	0.68	2.96	26.67	143.9	0.683
892	4.60	34.47	0.44	3.54	400	8.14	34.47	0.39	3.19	26.86	127.6	0.817
1238	3.49	34.51	0.88	3.41	500	7.13	34.44	0.28	3.34	26.98	116.3	0.940
					600	6.34	34.43	0.26	3.45	27.08	107.9	1.052
					700	5.71	34.43	0.28	3.50	27.16	100.4	1.156
					800	5.12	34.45	0.36	3.53	27.25	92.8	1.253
					1000	4.14	34.49	0.55	3.53	27.39	79.5	1.425

N. B. SCOFIELD; May 2, 1949; 0942 GCT; 25°26'N, 118°16'W; sounding, 2,040 fm; wind, 240°, force 3; weather, overcast; sea, very rough; wire angle, 10°. 1206

0	17.66	34.04	4.98	0.57	0	17.66	34.04	4.98	0.57	24.64	331.2	0.000
10	17.69	34.02	5.53	0.43	10	17.69	34.02	5.53	0.43	24.62	333.4	0.033
23u	17.68	34.02	4.86	0.42	20	17.68	34.02	4.87	0.42	24.62	333.6	0.066
44u	17.68	34.00	6.19r	0.41	30	17.67	34.02	4.92	0.42	24.62	333.7	0.100
64u	16.46	33.92	5.47	0.45	50	17.63	33.98	5.27	0.42	24.60	336.5	0.167
83u	15.02	33.77	4.44	0.49	75	15.50	33.85	5.20	0.47	25.00	299.3	0.246
118u	13.37	33.62	4.80	0.95	100	14.27	33.67	4.65	0.63	25.12	287.8	0.320
152u	10.91	34.04	2.58	2.17	150	11.02	34.02	2.65	2.12	26.03	202.4	0.443
219u	9.78	34.23	1.57	2.42	200	10.02	34.19	1.82	2.34	26.34	173.8	0.537
300u	9.13	34.40	0.54	2.92	250	9.50	34.32	1.12	2.68	26.53	156.9	0.619
417p	7.71	34.44	0.32	3.13	300	9.13	34.40	0.54	2.92	26.65	146.1	0.695
712p	5.20	34.43	0.34	3.41	400	7.90	34.44	0.36	3.10	26.87	126.1	0.830
1054p	3.95	34.51	0.58	3.40	500	6.88	34.44	0.32	3.23	27.02	113.0	0.950
					600	6.04	34.43	0.33	3.34	27.12	103.9	1.059
					700	5.29	34.43	0.34	3.41	27.21	95.0	1.158
					800	4.73	34.44	0.40	3.42	27.28	88.3	1.250
					1000	4.03	34.49	0.53	3.41	27.40	78.3	1.417

N. B. SCOFIELD; May 2, 1949; 1538 GCT; 25°02'N, 118°49'W; sounding, 2,130 fm; wind, 270°, force 2; weather, overcast; sea, rough; wire angle, 18°. 1207

0	17.50	34.00	5.52	0.51	0	17.50	34.00	5.52	0.51	24.65	330.5	0.000
9	17.41	33.93	5.39	0.47	10	17.40	33.93	5.39	0.47	24.62	333.7	0.033
22	17.38	33.91	5.32	0.50	20	17.39	33.91	5.32	0.50	24.61	334.9	0.067
45	16.66	33.86	5.65	0.48	30	17.32	33.90	5.40	0.49	24.62	334.4	0.100
68	15.56	33.78	5.67	0.49	50	16.44	33.85	5.67	0.48	24.78	319.1	0.166
90	14.72	33.73	5.52	0.60	75	15.28	33.77	5.63	0.51	24.98	300.7	0.243
135	11.16	33.69	3.36	1.77	100	13.57	33.72	5.28	0.69	25.31	270.1	0.314
179	10.14	34.11	2.17	2.40	150	10.75	33.72	2.82	2.10	25.84	219.8	0.437
269	9.50	34.34	1.02	2.85	200	9.94	34.18	1.82	2.52	26.34	173.3	0.535
360	8.51	34.47	0.42	3.18	250	9.63	34.30	1.18	2.77	26.49	160.4	0.618
542	6.47	34.36	0.33	3.37	300	9.28	34.40	0.77	2.99	26.63	148.5	0.696
829	4.74	34.47	0.40	3.54	400	7.97	34.47	0.37	3.26	26.88	124.8	0.832
					500	6.86	34.40	0.37	3.36	26.99	115.5	0.952
					600	6.05	34.36	0.35	3.42	27.06	109.2	1.064
					700	5.42	34.40	0.33	3.47	27.17	99.0	1.168
					800	4.88	34.46	0.39	3.53	27.28	88.8	1.262
					1000	(3.94)	(34.49)	-	-	(27.41)	(77.3)	(1.429)

S10

CCOFI

4905

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
1208	N. B. SCOFIELD; May 2, 1949; 2108 GCT; 24°38'N, 119°22'W; sounding, 2,240 fm; wind, 310°, force 2; weather, cloudy; sea, rough; wire angle, 22°.											
0	17.70	33.91	5.29	0.51	0	17.70	33.91	5.29	0.51	24.53	341.5	0.000
9	17.36	33.82	5.07	0.43	10	17.36	33.82	5.05	0.43	24.55	340.6	0.034
23	17.26	33.84	4.74	0.45	20	17.28	33.83	4.80	0.44	24.57	338.2	0.068
46	16.53	33.89	5.28	0.43	30	17.17	33.86	4.75	0.45	24.62	334.1	0.102
68	16.20	33.91	4.71	0.44	50	16.49	33.90	5.34	0.43	24.81	316.5	0.167
90	15.77	33.80	5.37	0.44	75	16.08	33.89	5.40	0.44	24.90	309.0	0.245
134	14.07	33.55	4.74	0.64	100	15.47	33.74	5.28	0.46	24.92	307.2	0.322
178	10.27	33.69	3.46	1.73	150	12.62	33.54	4.38	0.92	25.36	266.5	0.465
266	9.58	34.29	1.27	2.72	200	10.10	33.94	2.69	2.08	26.13	193.8	0.581
354	8.74	34.36	0.56	3.09	250	9.70	34.25	1.52	2.62	26.44	165.4	0.670
532	6.37	34.31	0.36	3.31	300	9.31	34.34	0.92	2.91	26.57	153.3	0.750
806	4.88	34.43	0.33	3.54	400	7.95	34.34	0.47	3.16	26.78	134.2	0.894
1135	3.71	34.43	0.69	3.55	500	6.64	34.31	0.40	3.27	26.95	119.1	1.020
					600	5.91	34.33	0.31	3.38	27.06	109.5	1.135
					700	5.37	34.38	0.28	3.48	27.16	99.7	1.239
					800	4.90	34.43	0.32	3.54	27.26	91.2	1.335
					1000	4.06	34.43	0.50	3.54	27.35	83.1	1.509
1209	N. B. SCOFIELD; May 3, 1949; 0252 GCT; 24°12'N, 119°56'W; sounding, 2,270 fm; wind, 317°, force 3; weather, cloudy; sea, rough; wire angle, 15°.											
0	17.90	33.98	5.20	0.46	0	17.90	33.98	5.20	0.46	24.54	341.2	0.000
9	17.90	33.93	5.33	0.45	10	17.90	33.93	5.35	0.45	24.50	345.2	0.034
23	17.82	33.86	5.31	0.45	20	17.83	33.88	5.34	0.45	24.47	347.6	0.069
47	17.68	33.82	5.35	0.44	30	17.77	33.84	5.33	0.45	24.46	349.2	0.104
71	16.19	33.75	5.43	0.46	50	17.66	33.81	5.37	0.47	24.46	349.4	0.174
95	15.88	33.86	5.39	0.50	75	16.05	33.74	5.42	0.47	24.79	319.4	0.257
144	13.66	33.51	5.56	0.93	100	15.86	33.86	5.40	0.53	24.92	307.0	0.336
192	10.79	33.84	2.72	2.13	150	13.00	33.52	5.27	1.02	25.27	275.2	0.481
288	-	34.36	0.93	2.82	200	10.71	33.99	2.20	2.23	26.06	200.3	0.601
385	8.61	34.40	0.60	3.09	250	10.15	34.29	1.34	2.63	26.39	169.9	0.693
580	6.52	34.36	0.33	3.40	300	9.57	34.37	0.89	2.96	26.55	155.2	0.774
876	4.72	34.43	0.40	3.51	400	8.43	34.40	0.58	3.12	26.76	137.0	0.920
1226	3.55	34.52	0.86	3.48	500	7.28	34.37	0.42	3.30	26.91	123.6	1.050
					600	6.37	34.36	0.35	3.42	27.02	113.2	1.169
					700	5.71	34.39	0.35	3.48	27.13	103.3	1.277
					800	5.13	34.41	0.36	3.51	27.22	95.6	1.377
					1000	4.11	34.46	0.47	3.50	27.37	81.3	1.554
1210	N. B. SCOFIELD; May 3, 1949; 0837 GCT; 23°48'N, 120°30'W; sounding, 2,215 fm; wind, 315°, force 3; weather, cloudy; sea, rough; wire angle, 20°.											
0	17.80	34.04	4.65	0.52	0	17.80	34.04	4.65	0.52	24.61	334.5	0.000
9	18.33	34.05	5.05	0.46	10	18.32	34.05	5.04	0.46	24.49	346.2	0.034
23	18.33	34.09	4.82	0.46	20	18.32	34.08	4.88	0.46	24.51	344.3	0.068
46	16.85	33.82	4.86	0.45	30	18.07	34.09	4.83	0.47	24.58	338.1	0.103
69	16.30	33.80	4.94	0.47	50	16.72	33.81	4.88	0.45	24.69	328.1	0.169
92	15.85	33.78	5.03	0.51	75	16.19	33.80	4.97	0.48	24.80	317.8	0.250
138	13.06	33.53	4.10	0.97	100	15.63	33.77	4.90	0.56	24.91	308.7	0.328
182	10.48	33.86	2.64	1.93	150	12.15	33.56	3.80	1.20	25.46	256.2	0.469
272	9.90	34.38	0.88	2.73	200	10.30	34.14	3.00	2.18	26.25	182.3	0.580
362	8.88	34.45	0.43	3.04	250	10.01	34.34	1.10	2.60	26.46	163.8	0.666
545	6.75	34.42	0.45	3.30	300	9.69	34.41	0.66	2.85	26.56	154.4	0.745
827	4.88	-	0.44	3.44	400	8.31	34.45	0.43	3.12	26.82	131.6	0.888
1170	3.78	34.49	0.67	3.48	500	7.18	34.43	0.44	3.26	26.97	117.8	1.013
					600	6.30	34.42	0.44	3.35	27.08	108.0	1.126
					700	5.57	34.44	0.44	3.41	27.19	97.9	1.229
					800	5.00	34.45	0.44	3.44	27.26	91.0	1.323
					1000	4.17	34.47	0.50	3.46	27.37	81.2	1.495

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

BLACK DOUGLAS; June 2, 1949; 0500 GCT; latitude, missing, longitude, missing; sounding, missing; wind, 315°, force 5; weather, partly cloudy; sea, high; wire angle, 30°. 401

0	11.96	-	0	11.96	(32.83)	(24.93)	(303.4)	0.000
10	12.00[a]	-	10	12.00	(32.83)	(24.93)	(304.2)	0.030
32	11.93[b]	32.84E	20	11.99	(32.83)	(24.93)	(304.3)	0.061
54	9.02	33.04	30	11.96	(32.84)	(24.94)	(303.3)	0.091
74	9.88	33.46	50	11.67	33.00	25.12	286.7	0.150
114	9.65r	33.87	75	9.85	33.48	25.81	221.2	0.214
148	8.75	33.98	100	9.29	33.80	26.15	189.1	0.265
224	8.42	34.05	150	8.74	33.98	26.38	168.4	0.354
304	6.79	34.09	200	8.52	34.04	26.46	161.6	0.436
479	5.62	34.22	250	8.00	34.07	26.56	152.4	0.516
594p	4.83r	34.25	300	6.84	34.09	26.75	135.3	0.587
			400	6.06	34.17	26.91	120.4	0.715
			500	(5.44)	34.23	(27.04)	(109.5)	0.830
			600	(4.79)	34.25	(27.13)	(101.1)	(0.935)

BLACK DOUGLAS; June 6, 1949; 0032 GCT; latitude, missing, longitude, missing; sounding, missing; wind, 335°, force 3; weather, clear; sea, high; wire angle, 28°. 402

0	12.68	32.92E	0	12.68	32.92	24.87	309.6	0.000
8	12.21	32.94	10	12.00	32.95	25.01	296.1	0.030
21	9.66	33.10	20	10.00	33.04	25.44	255.2	0.058
42	8.81	33.19	30	9.03	33.14	25.68	232.8	0.082
64	8.56	33.51	50	8.68	33.21	25.79	222.7	0.128
85	8.47	33.64	75	8.50	33.59	26.11	192.5	0.180
128	8.09	33.96	100	8.37	33.80	26.30	175.2	0.226
162	-	33.93	150	8.00	33.94	26.46	160.3	0.309
230	8.26	34.07	200	8.25	34.00	26.47	160.2	0.390
460	5.71	34.14	250	8.19	34.08	26.54	154.3	0.468
739	4.38	34.33	300	7.63	34.10	26.64	145.6	0.544
1078	3.38	34.43	400	6.28	34.12	26.84	127.2	0.679
			500	5.45	34.16	26.98	114.9	0.800
			600	4.94	34.23	27.09	104.5	0.911
			700	4.54	34.30	27.20	95.4	1.011
			800	4.17	34.36	27.28	87.5	1.102
			1000	3.60	34.42	27.39	78.3	1.268

CREST; June 9, 1949; 0528, 0603 GCT; 38°50'N, 124°12'W; sounding, missing; wind, 315°, force 3; weather, clear; sea, slight; wire angle, 25°, 25°. 501

0	11.6	33.27	5.20	0	11.6	33.27	5.20	25.34	264.8	0.000
9	11.29	33.26	4.60	10	11.30	33.26	4.50	25.39	260.2	0.026
22	10.86	33.26	3.31	20	10.90	33.26	3.31	25.46	253.5	0.052
45	6.88r	33.17	3.79	30	9.98	33.25	3.48	25.61	239.3	0.077
67	8.73u	33.51	3.22	50	9.27	33.17	3.73	25.67	234.4	0.124
90	8.34u	33.69	2.80	75	8.80	33.59	3.07	26.07	196.8	0.178
				100	8.45	33.76	2.59	26.25	179.4	0.225
136	8.09	33.89	2.06	150	8.02	33.92	1.85	26.44	162.3	0.310
181	7.84	33.98	1.52	200	7.72	33.98	1.47	26.54	154.1	0.390
272	7.08	34.00	1.37	250	7.28	34.00	1.40	26.62	147.3	0.465
362	6.08	34.02	1.01	300	6.67	34.01	1.30	26.71	138.9	0.537
544	-	34.14	0.46	400	5.81	34.04	0.87	26.85	126.5	0.669
819	4.17	34.34	0.26	500	5.25	34.11	0.57	26.97	115.4	0.791
1109	3.39	34.45	0.52	600	4.83	34.19	0.35	27.08	105.3	0.901
				700	4.51	34.27	0.26	27.17	97.4	1.002
				800	4.24	34.33	0.27	27.25	90.7	1.096
				1000	3.68	34.41	0.42	27.37	80.1	1.267

a) Middle thermometer reading of 12.82° rejected.
b) Middle thermometer reading of 12.06° rejected.

E Evaporation of all salinity samples occurred on Cruise 4906 for stations 401 and 402 only. Estimated average corrections to values given here can be made by subtracting 0.030 ‰ from the value of S, 0.025 from σ_t and adding 2.2 to $10^5\delta$ at all depths; to ΔD add 0.002 for each 100 meter depth increment.

SIO

CCOFI

4906

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

502

CREST; June 9, 1949; 0005 GCT; 38°39'N, 124°54'W; sounding, missing; wind, 360°, force 4; weather, clear; sea, moderate; wire angle, 24°.

0	13.54	32.86	4.38	0	13.54	32.86	4.38	24.65	329.8	0.000
10	13.52	32.86	5.58	10	13.52	32.86	5.58	24.66	330.0	0.033
23	13.23	32.89	4.26	20	13.33	32.88	4.28	24.71	324.9	0.066
46	12.82	32.94	4.49	30	13.07	32.91	4.29	24.78	318.3	0.098
69	9.48	32.95	4.41	50	12.00	32.94	4.49	25.01	296.9	0.159
92	9.64	33.13	4.11	75	9.52	32.99	4.34	25.48	252.5	0.228
137	8.54	33.60	2.74	100	9.53	33.20	3.87	25.65	237.4	0.289
182	8.03	33.87	1.99	150	8.40	33.71	2.50	26.22	183.1	0.395
273	6.94	34.04	1.58	200	7.87	33.92	1.89	26.47	160.7	0.480
364	6.37	34.14	1.01	250	7.18	34.01	1.69	26.64	145.2	0.557
438	5.80	34.16	0.75	300	6.77	34.08	1.39	26.75	135.0	0.627
711	4.51	34.40	0.24	400	6.09	34.15	0.87	26.89	122.5	0.756
1093	3.51	34.49	0.62	500	5.43	34.20	0.52	27.01	111.6	0.873
				600	4.94	34.29	0.30	27.14	100.0	0.979
				700	4.55	34.39	0.25	27.26	88.9	1.073
				800	4.22	34.45	0.30	27.35	81.3	1.158
				1000	3.72	34.49	0.50	27.43	74.7	1.315

503

CREST; June 8, 1949; 1812 GCT; 38°28'N, 125°42'W; sounding, missing; wind, 360°, force 3; weather, partly cloudy; sea, moderate; wire angle, 5°.

0	13.73	32.97	4.80	0	13.73	32.97	4.80	24.70	325.6	0.000
10	13.73	32.94	4.59	10	13.73	32.94	4.59	24.68	328.1	0.033
25	13.35	32.95	3.91	20	13.57	32.94	3.93	24.71	325.4	0.065
48	11.44	32.97	4.30	30	12.92	32.95	3.97	24.84	312.4	0.097
73	10.62	33.12	4.09	50	11.32	32.99	4.28	25.18	281.2	0.157
98	10.47	33.28	4.00	75	10.60	33.15	4.08	25.43	258.0	0.224
144	9.24	33.62	3.16	100	10.45	33.31	3.98	25.58	243.8	0.287
189	8.29	33.60	2.28	150	9.05	33.68	3.04	26.10	195.3	0.397
284	7.68	34.13	1.25	200	8.20	33.93	2.14	26.43	164.8	0.486
379	6.84	34.20	0.81	250	7.85	34.07	1.52	26.59	150.0	0.566
572	5.27	34.20	0.55	300	7.55	34.15	1.16	26.69	140.7	0.638
861u	4.03[a]	34.36	0.30	400	6.63	34.20	0.78	26.86	125.8	0.771
1155u	3.95[b]	34.56	0.50	500	5.76	34.20	0.65	26.97	115.6	0.892
				600	5.10	34.21	0.50	27.06	108.1	1.004
				700	4.57	34.25	0.35	27.15	99.4	1.108
				800	4.20	34.32	0.30	27.25	90.8	1.203
				1000	3.92	34.45	0.37	27.38	79.9	1.373

504

CREST; June 8, 1949; 1112 GCT; 38°18'N, 126°31'W; sounding, missing; wind, 360°, force 2; weather, partly cloudy; sea, moderate; wire angle, 0°.

0	13.58	32.86	5.12	0	13.58	32.86	5.12	24.65	330.7	0.000
10	13.51	32.84	4.73	10	13.51	32.84	4.73	24.65	331.2	0.033
25	13.20	32.84	5.21	20	13.38	32.84	5.20	24.67	328.9	0.066
47	11.36	32.94	4.44	30	12.89	32.86	5.00	24.78	318.7	0.099
69	10.29	33.10	4.52	50	11.18	32.95	4.44	25.17	281.8	0.159
90	9.56	33.08	3.63	75	10.05	33.10	4.25	25.48	252.5	0.225
129	8.54	33.55	3.88	100	9.26	33.27	3.61	25.75	227.8	0.285
168	7.94	33.82	3.13	150	8.19	33.70	3.46	26.25	181.0	0.388
256	6.82	34.52r	2.01	200	7.50	33.90	2.64	26.51	156.9	0.472
345	5.86	34.00	1.31	250	6.89	33.96	2.08	26.64	144.8	0.548
523	4.94	34.20	0.52	300	6.30	33.99	1.64	26.74	135.8	0.618
792	4.03[c]	34.42	0.37	400	5.52	34.04	0.95	26.87	123.8	0.747
1067	3.31	34.52	0.59	500	5.05	34.17	0.58	27.03	109.2	0.864
				600	4.65	34.29	0.40	27.17	96.5	0.967
				700	4.30	34.37	0.35	27.27	87.5	1.059
				800	4.00	34.42	0.37	27.35	81.3	1.143
				1000	3.46	34.50	0.53	27.46	70.8	1.296

a) Left thermometer reading of 3.91° rejected.
b) Left thermometer reading of 4.19° rejected.
c) Middle thermometer reading of 4.22° rejected.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	µg at/L	m	°C	‰	ml/L	µg at/L	g/L	$10^5 cm^3/g$	dyn. m	

CREST; June 8, 1949; 0448 GCT; 38°10'N, 127°21'W; sounding, missing; wind, 015°, force 4; weather, cloudy; sea, moderate; wire angle, 17°. 505

0	14.03	32.99	5.16	0	14.03	32.99	5.16	24.65	329.9	0.000
10	14.08	32.99	4.61	10	14.08	32.99	4.61	24.64	331.4	0.033
23	13.23	32.94	4.41	20	13.50	32.95	4.42	24.73	323.1	0.066
47	10.75	32.84	4.65	30	11.75	32.90	4.45	25.03	295.0	0.097
71	10.64	33.10	4.39	50	10.73	32.84	4.61	25.16	282.3	0.154
95	10.54	33.35	4.26	75	10.65	33.20	4.36	25.46	254.9	0.221
143	8.64	33.56	2.78	100	10.50	33.38	4.18	25.62	239.6	0.283
191	7.78	33.86	2.36	150	8.47	33.62	2.70	26.14	191.0	0.391
286	6.65	33.93	1.65	200	7.67	33.87	2.30	26.46	161.4	0.479
382	5.82	34.07	0.91	250	7.07	33.91	1.96	26.57	151.1	0.558
577	4.82	34.25	0.37	300	6.50	33.94	1.52	26.67	142.0	0.630
872	3.81	34.36	0.27	400	5.69	34.09	0.83	26.90	121.8	0.762
1170	3.07	34.49	0.67	500	5.14	34.19	0.54	27.04	108.7	0.878
				600	4.72	34.26	0.34	27.14	98.8	0.981
				700	4.37	34.29	0.25	27.20	94.1	1.078
				800	4.02	34.33	0.24	27.27	88.2	1.169
				1000	3.46	34.41	0.42	27.39	77.5	1.334

CREST; June 7, 1949; 2231 GCT; 37°57'N, 128°10'W; sounding, missing; wind, 020°, force 3; weather, cloudy; sea, moderate; wire angle, 11°. 506

0	14.18	32.88	4.56	0	14.18	32.88	4.56	24.54	341.0	0.000
10	13.99	32.84	4.40	10	13.99	32.84	4.40	24.54	340.6	0.034
25	13.90	32.84	4.58	20	13.93	32.84	4.55	24.55	339.8	0.068
47	11.80	32.84	4.41	30	13.78	32.84	4.55	24.58	337.1	0.102
70	11.63[a]	32.83	4.89	50	11.78	32.84	4.50	24.98	300.3	0.166
94	9.52	32.79	4.30	75	11.49	32.82	4.75	25.01	297.3	0.240
139	8.58	33.40	3.37	100	9.32	32.80	4.15	24.37	263.8	0.310
186	8.10	33.77	2.32	150	8.44	33.55	2.97	26.09	195.7	0.426
282	6.90	33.97	1.76	200	7.95	33.82	2.24	26.38	169.3	0.517
377	5.84	34.05	0.99	250	7.35	33.92	1.96	26.54	154.3	0.597
569	4.85	34.22	0.35	300	6.67	33.99	1.59	26.69	140.2	0.671
862	4.00	34.60r	0.29	400	5.70	34.07	0.87	26.88	123.5	0.803
1157	3.22	34.49	0.50	500	5.14	34.16	0.50	27.02	111.0	0.921
				600	4.73	34.24	0.32	27.13	101.2	1.027
				700	4.42	34.29	0.28	27.20	94.9	1.125
				800	4.15	34.33	0.28	27.26	89.5	1.217
				1000	3.61	34.42	0.35	27.39	78.5	1.385

CREST; June 7, 1949; 1545 GCT; 37°51'N, 129°03'W; sounding, missing; wind, 010°, force 4; weather, cloudy; sea, moderate; wire angle, 12°. 507

0	15.00	32.95	5.54	0	15.00	32.95	5.54	24.41	352.7	0.000
10	14.98	32.86	5.54	10	14.98	32.86	5.54	24.35	358.9	0.036
24	14.99	32.94	5.52	20	14.97	32.94	5.52	24.41	353.3	0.071
48	13.22	32.79	5.60	30	14.94	32.93	5.53	24.41	353.8	0.107
73	10.52[b]	32.79	5.90	50	12.55	32.79	5.60	24.79	317.9	0.174
97	9.70	32.77	5.76	75	10.40	32.79	5.90	25.18	281.2	0.249
146	8.66	33.42	4.54	100	9.61	32.77	5.65	25.30	270.4	0.317
195	7.96	33.82	3.69	150	8.58	33.48	4.47	26.02	202.9	0.436
293	6.84	33.93	-	200	7.90	33.82	3.62	26.38	168.6	0.529
391	5.80	33.98	1.60	250	7.33	33.90	2.94	26.53	155.3	0.609
588	4.43	34.13	0.78	300	6.74	33.93	2.37	26.63	145.8	0.685
885	3.87	34.36	0.41	400	5.73	33.98	1.55	26.80	130.5	0.822
1184	3.05	34.49	0.66	500	4.94	34.05	1.07	26.95	116.8	0.946
				600	4.38	34.14	0.74	27.09	104.6	1.058
				700	4.19	34.23	0.56	27.18	96.4	1.157
				800	4.02	34.30	0.44	27.25	90.6	1.252
				1000	3.55	34.42	0.46	27.39	77.8	1.420

a) Left thermometer reading of 10.62° rejected.
b) Left thermometer reading of 10.99° rejected.

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

508 CREST; June 7, 1949; 0921 GCT; 37°36'N, 129°49'W; sounding, missing; wind, 360°, force 3; weather, partly cloudy; sea, moderate; wire angle, 14°.

0	14.77	32.83	4.31	0	14.77	32.83	4.31	24.37	356.7	0.000
10	14.84	32.84	4.25	10	14.84	32.84	4.25	24.36	357.8	0.036
24	14.84	32.83	4.05	20	14.84	32.84	4.07	24.36	358.0	0.071
48	12.04	32.83	4.20	30	14.80	32.83	4.06	24.37	358.1	0.107
72	10.65	32.77	4.22	50	11.88	32.83	4.20	24.95	302.7	0.173
97	10.04	32.86	4.28	75	10.55	32.77	4.20	25.14	284.9	0.247
145	8.90	-	3.09	100	9.97	32.88	4.29	25.33	267.6	0.316
194	8.11	33.86	2.65	150	8.82	33.63	3.06	26.10	195.5	0.432
291	6.90	-	1.87	200	8.05	33.87	2.62	26.40	167.1	0.522
388	5.98	34.05	0.90	250	7.39	33.96	2.20	26.57	151.7	0.602
584	4.75	34.29	0.43	300	6.82	34.01	1.76	26.69	140.9	0.675
881	3.91	34.54r	0.22	400	5.88	34.06	0.84	26.85	126.5	0.809
1180	3.10	35.25r	0.49	500	5.19	34.16	0.53	27.01	111.4	0.928
				600	4.18	(34.30)	0.40	(27.18)	(96.2)	(1.029)
				700	4.36	-	0.30	-	-	-
				800	4.10	-	0.24	-	-	-
				1000	3.59	-	0.30	-	-	-

509 CREST; June 7, 1949; 0233 GCT; 37°16'N, 130°37'W; sounding, missing; wind, 340°, force 4; weather, overcast; sea, very rough; wire angle, 30°.

0	15.43	32.88	4.29	0	15.43	32.88	4.29	24.27	366.7	0.000
9	15.44	32.90	4.75	10	15.44	32.90	4.75	24.28	365.9	0.037
21	15.46	32.86	4.37	20	15.46	32.86	4.38	24.24	369.4	0.073
42	14.81	32.88	4.60	30	15.38	32.86	4.45	24.26	368.0	0.110
63	11.28	32.81	4.74	50	12.65	32.88	4.65	24.84	313.1	0.178
84	10.39	32.84	4.95	75	10.73	32.81	4.87	25.14	285.0	0.253
124	9.44	32.99	4.08	100	9.94	32.88	4.69	25.33	267.3	0.322
166	8.42	33.48	3.01	150	8.77	33.16	3.38	25.74	229.4	0.447
253	7.23	33.95	1.92	200	7.95	33.87	2.49	26.42	165.5	0.545
341	5.94	33.96	1.67	250	7.27	33.95	1.95	26.58	150.8	0.624
520	4.55	34.09	0.73	300	6.48	33.96	1.75	26.69	140.3	0.697
793	3.77	34.33	0.27	400	5.37	33.97	1.44	26.84	126.9	0.830
1088	3.31	34.42	0.42	500	4.66	34.06	0.81	26.99	112.7	0.950
				600	4.28	34.18	0.50	27.13	100.4	1.057
				700	3.99	34.26	0.33	27.22	92.0	1.152
				800	3.75	34.33	0.26	27.30	85.1	1.242
				1000	3.42	34.41	0.31	27.40	77.0	1.404

510 CREST; June 6, 1949; 2041 GCT; 37°11'N, 131°22'W; sounding, missing; wind, 330°, force 4; weather, overcast; sea, rough; wire angle, 27°.

0	15.30	32.88	4.64	0	15.30	32.88	4.64	24.29	364.1	0.000
8	15.28	32.88	4.17	10	15.28	32.88	4.19	24.30	363.9	0.037
21	15.30	33.58r	4.69	20	15.30	32.88	4.67	24.29	364.7	0.073
43	13.20	32.88	4.64	30	15.26	32.89	4.67	24.31	363.3	0.109
64	11.34	32.81	4.93	50	12.25	32.87	4.75	24.91	306.6	0.176
85	10.46	32.81	4.79	75	10.91	32.81	4.90	25.11	288.0	0.250
127	9.22	32.86	3.75	100	10.05	32.82	4.40	25.26	273.6	0.321
169	8.20	33.18	3.06	150	8.59	32.92	3.35	25.58	244.3	0.450
254	7.19	33.93	1.93	200	7.76	33.62	2.60	26.25	181.3	0.557
340	6.26	34.01	1.27	250	7.22	33.92	1.99	26.56	152.3	0.640
518	5.01	34.22	0.61	300	6.68	33.99	1.53	26.69	140.5	0.714
793	3.77	34.07r	0.32	400	5.78	34.06	1.00	26.86	125.3	0.846
1077	3.25	34.42	0.35	500	5.15	34.19	0.65	27.04	108.8	0.963
				600	4.55	34.27	0.46	27.17	96.8	1.066
				700	4.08	34.29	0.35	27.24	90.7	1.159
				800	3.76	34.33	0.31	27.30	85.3	1.248
				1000	3.35	34.40	0.32	27.40	76.9	1.410

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OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	
CREST; June 3, 1949; 1944 GCT; 37°15'N, 123°15'W; sounding, missing; wind, 315°, force 5; weather, partly cloudy; sea, rough; wire angle, 40°.													601
0	11.76r	33.39	5.67		0	11.8	33.39	5.67		25.39	259.5	0.000	
8	11.74r	33.40	5.33		10	11.61	33.40	5.33		25.44	255.2	0.026	
19	11.47u	33.40	5.32		20	11.36	33.40	5.32		25.49	251.1	0.051	
38	10.71u	33.44	5.06		30	11.05	33.42	5.26		25.56	244.6	0.076	
56	9.88u	33.49	4.45		50	10.35	33.47	4.68		25.72	229.3	0.123	
75	9.30u	33.58	3.78		75	9.57	33.58	3.78		25.94	209.5	0.178	
111	8.60u	33.78	2.96		100	9.00	33.73	3.20		26.15	189.8	0.228	
147	8.20u	33.90	2.42		150	8.25	33.91	2.39		26.40	166.3	0.317	
219	7.54	34.05	1.76		200	7.72	34.02	1.93		26.57	151.2	0.397	
293	6.88	34.13	1.24		250	7.26	34.09	1.54		26.69	140.2	0.469	
449	5.78	34.19	0.61		300	6.82	34.14	1.22		26.79	131.3	0.537	
686	4.80[a]	34.31	0.27		400	6.08	34.18	0.77		26.92	120.3	0.663	
1061	3.56	34.45	0.56		500	5.57	34.21	0.49		27.00	112.6	0.780	
					600	5.14	34.26	0.34		27.09	104.9	0.888	
					700	4.75	34.32	0.29		27.19	96.3	0.989	
					800	4.39	34.36	0.33		27.26	90.5	1.082	
					1000	3.77	34.43	0.50		27.38	79.6	1.252	
CREST; June 4, 1949; 0210, 0230 GCT; 37°03'N, 123°57'W; sounding, missing; wind, 315°, force 6; weather, partly cloudy; sea, very rough; wire angle, 45°, 48°.													602
0	13.30	33.01	4.59		0	13.30	33.01	4.59		24.82	314.6	0.000	
11	13.09	32.99	4.70		10	13.08	32.99	4.69		24.84	312.3	0.031	
21	13.02	32.97	4.75		20	13.05	32.97	4.73		24.83	313.3	0.063	
37	12.92	32.97	4.73		30	12.97	32.97	4.74		24.85	312.2	0.094	
					50	11.30	33.05	5.25		25.23	276.3	0.153	
49	11.33	33.04	5.25		75	9.80	33.30	4.08		25.68	233.7	0.216	
57	10.59	33.15	4.44		100	8.64	33.51	3.21		26.03	200.8	0.271	
76	9.76	33.30	4.05		150	8.30	33.87	2.25		26.36	169.9	0.364	
100	8.64	33.51	3.21		200	7.71	33.94	2.03		26.50	156.9	0.445	
158	8.25	33.89	2.11		250	7.16	33.98	1.78		26.62	147.3	0.521	
213	7.56	33.95	1.97		300	6.65	34.03	1.44		26.72	137.2	0.592	
325	-	34.05	1.23		400	5.77	34.11	0.85		26.90	121.4	0.721	
493	5.11[b]	34.18	0.56		500	5.09	34.19	0.55		27.05	108.1	0.836	
814	4.08	34.38	0.31		600	4.62	34.26	0.44		27.15	98.5	0.939	
					700	4.35	34.33	0.37		27.24	90.9	1.034	
					800	4.11	34.38	0.32		27.30	85.5	1.123	
					1000	(3.62)	(34.44)	-		(27.40)	(77.3)	(1.286)	
CREST; June 4, 1949; 1523 GCT; 36°34'N, 125°29'W; sounding, missing; wind, 330°, force 6; weather, partly cloudy; sea, rough; wire angle, 15°.													604
0	15.52r	33.04	4.64		0	(14.62)	33.04	4.64		(24.57)	(338.2)	0.000	
10	14.62	33.01	4.76		10	14.62	33.01	4.76		24.54	340.7	0.034	
24	14.61	33.01	4.55		20	14.61	33.01	4.67		24.55	340.7	0.068	
48	13.13	32.97	4.85		30	14.59	33.00	4.56		24.54	341.6	0.102	
71	10.07	33.22	4.25		50	12.50	32.97	4.81		24.94	303.8	0.167	
95	9.20	33.44	3.87		75	9.85	33.26	4.30		25.84	237.6	0.234	
142	8.36	33.75	2.46		100	9.08	33.46	3.75		25.92	211.1	0.290	
189	7.91	33.95	2.18		150	8.26	33.78	2.40		26.30	175.8	0.387	
283	6.87	34.02	1.48		200	7.80	33.97	2.10		26.52	156.0	0.470	
376	5.67	34.07	1.17		250	7.28	34.01	1.73		26.62	146.5	0.546	
564	4.84	34.22	0.36		300	6.65	34.03	1.42		26.72	137.2	0.616	
846	4.09[c]	34.34	0.44		400	5.49	34.08	1.07		26.91	120.1	0.745	
1233	3.15	34.47	0.66		500	5.00	34.17	0.57		27.04	108.6	0.860	
					600	4.74	34.24	0.36		27.12	101.4	0.964	
					700	4.48	34.28	0.38		27.19	96.2	1.063	
					800	4.19	34.32	0.42		27.25	90.7	1.157	
					1000	3.66	34.39	0.54		27.36	81.3	1.328	

a) Middle thermometer reading of 4.91° rejected.
b) Middle thermometer reading of 5.25° rejected.
c) Middle thermometer reading of 4.17° rejected.

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

605 CREST; June 4, 1949; 2145 GCT; 36°24'N, 126°17'W; sounding, missing; wind, 330°, force 5; weather, haze; sea, rough; wire angle, 25°.

0	14.28	32.95	4.41	0	14.28	32.95	4.41	24.57	338.3	0.000
9	14.28	32.99	4.64	10	14.28	32.99	4.65	24.60	335.6	0.034
22	14.18	32.97	4.54	20	14.21	32.98	4.56	24.61	335.0	0.067
45	12.40	33.01	4.77	30	13.90	32.97	4.58	24.66	330.1	0.100
67	10.02	32.77	4.13	50	11.78	33.01	4.78	25.11	287.6	0.162
90	9.98	33.08	4.77	75	10.00	32.77	4.18	25.23	276.2	0.233
136	8.64	33.58	2.95	100	9.70	33.27	4.68	25.67	234.8	0.297
181	8.22	33.86	2.26	150	8.51	33.68	2.70	26.18	187.2	0.402
271	7.04	34.02	1.79	200	7.98	33.92	2.16	26.45	162.3	0.489
362	6.32	34.07	1.08	250	7.28	34.01	1.94	26.62	146.5	0.566
546	5.14	34.22	0.40	300	6.81	34.04	1.53	26.71	138.4	0.638
831	4.12[a]	34.42	0.36	400	6.04	34.10	0.91	26.86	125.8	0.770
1124	3.36	34.49	0.56	500	5.38	34.19	0.53	27.01	111.6	0.889
				600	4.92	34.27	0.35	27.13	101.3	0.995
				700	4.56	34.34	0.30	27.22	92.6	1.092
				800	4.22	34.41	0.31	27.32	84.5	1.181
				1000	3.60	34.47	0.44	27.43	74.8	1.340

606 CREST; June 5, 1949; 0445 GCT; 36°10'N, 127°05'W; sounding, missing; wind, 360°, force 3; weather, partly cloudy; sea, rough; wire angle, 22°.

0	14.09	32.90	4.94	0	14.09	32.90	4.94	24.56	338.5	0.000
9	14.12	32.83	4.58	10	14.12	32.83	4.58	24.51	344.2	0.034
22	14.10	32.86	4.52	20	14.11	32.85	4.51	24.53	342.5	0.068
45	12.48	32.90	4.64	30	13.60	32.88	4.54	24.65	330.7	0.102
66	11.33	32.94	-	50	12.26	32.91	4.64	24.94	303.7	0.166
87	9.98	32.94	4.56	75	10.74	32.94	4.58	25.24	275.8	0.238
128	8.82	33.31	3.65	100	9.50	32.96	4.37	25.46	254.7	0.304
169	8.24	33.77	2.45	150	8.50	33.65	2.95	26.16	189.3	0.416
254	7.14	33.95	2.26	200	7.81	33.86	2.37	26.43	164.3	0.504
340	6.21	34.02	1.57	250	7.17	33.94	2.30	26.58	150.3	0.582
519	5.10	34.22	0.49	300	6.61	33.99	1.93	26.70	139.7	0.655
792	4.07	34.33	0.33	400	5.79	34.08	1.16	26.87	124.0	0.787
1085	3.37	34.47	0.56	500	5.20	34.21	0.54	27.05	108.0	0.903
				600	4.74	34.25	0.34	27.13	101.6	1.008
				700	4.36	34.29	0.31	27.21	94.1	1.105
				800	4.04	34.33	0.35	27.27	88.6	1.197
				1000	3.52	34.45	0.50	27.41	75.3	1.360

607 CREST; June 5, 1949; 1123 GCT; 35°58'N, 127°50'W; sounding, missing; wind, 290°, force 4; weather, overcast; sea, rough; wire angle, 26°.

0	14.29	32.92	5.51	0	14.29	32.92	5.51	24.57	337.6	0.000
23	14.33	32.86	5.63	10	14.30	32.91	5.60	24.53	341.8	0.034
35	-	32.94	5.33	20	14.32	32.87	5.63	24.50	345.3	0.068
57	10.97	32.88	5.58	30	13.55	32.88	5.50	24.67	329.6	0.102
78	10.18	32.84	5.20	50	11.27	32.90	5.43	25.11	387.1	0.164
99	9.52	33.10	4.85	75	10.35	32.84	5.36	25.23	276.6	0.234
142	8.39	33.48	3.98	100	9.49	33.13	4.84	25.60	241.8	0.299
185	8.03	34.00	3.29	150	8.32	33.75	3.87	26.27	179.1	0.404
270	6.87	33.95	2.49	200	7.85	34.00	3.09	26.53	154.6	0.487
356	5.82	33.98	1.99	250	7.15	33.96	2.63	26.60	148.5	0.564
532	4.98	34.18	0.54	300	6.40	33.95	2.28	26.70	140.0	0.635
807	4.02	34.33	0.40	400	5.58	34.02	1.76	26.85	125.8	0.768
1100	3.37	34.51	0.70	500	5.11	34.14	0.73	27.00	112.2	0.887
				600	4.71	34.23	0.44	27.12	101.8	0.994
				700	4.35	34.28	0.38	27.20	94.8	1.093
				800	4.04	34.33	0.39	27.27	88.6	1.184
				1000	3.55	34.44	0.57	27.41	76.3	1.349

a) Middle thermometer reading of 4.23° rejected.

OBSERVED					INTERPOLATED					COMPUTED			
Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m	

CREST; June 5, 1949; 1746 GCT; 35°45'N, 128°38'W; sounding, missing; wind, 315°, force 3; weather, overcast; sea, moderate; wire angle, 21°. 608

0	14.61	32.92	4.96	0	14.61	32.92	4.96	24.48	346.8	0.000	
9	14.59	32.92	4.69	10	14.58	32.92	4.69	24.48	346.6	0.035	
23	14.55	32.86	4.70	20	14.55	32.87	4.71	24.45	350.0	0.070	
46	11.54r	32.94	4.75	30	14.50	32.87	4.74	24.46	349.2	0.104	
70	11.60	-	4.65	50	12.83	32.94	4.73	24.85	312.1	0.171	
93	10.86	32.92	4.81	75	11.43	32.93	4.65	25.11	288.3	0.246	
139	9.57	33.28	4.06	100	10.64	32.93	4.78	25.25	275.1	0.316	
185	8.51	33.68	3.53	150	9.30	33.40	3.91	25.84	219.8	0.440	
277	7.21	33.96	2.73	200	8.33	33.75	3.38	26.27	179.9	0.540	
369	5.92	33.96	1.86	250	7.65	33.91	2.98	26.49	159.1	0.624	
553	4.88u	34.18	0.54	300	6.83	33.97	2.50	26.66	144.0	0.701	
834	3.94	34.34	0.23	400	5.66	33.96	1.60	26.80	131.2	0.837	
1124	3.22	34.43	0.54	500	5.13	34.07	0.79	26.95	117.5	0.962	
				600	4.69	34.22	0.41	27.12	102.2	1.072	
				700	4.35	34.28	0.26	27.20	94.7	1.170	
				800	4.03	34.33	0.23	27.27	88.2	1.261	
				1000	3.50	34.40	0.37	27.38	78.5	1.429	

CREST; June 5, 1949; 2345 GCT; 35°32'N, 129°24'W; sounding, missing; wind, 315°, force 2; weather, overcast; sea, moderate; wire angle, 10°. 609

0	15.66	33.03	4.56	0	15.66	33.03	4.56	24.33	360.6	0.000	
10	15.60	33.03	4.37	10	15.60	33.03	4.37	24.35	359.7	0.036	
25	15.52	33.03	4.51	20	15.55	33.03	4.44	24.36	358.9	0.072	
49	14.25	33.37	4.64	30	15.51	33.04	4.57	24.37	357.6	0.108	
73	13.27	33.39	4.53	50	13.92	33.37	4.64	24.96	301.5	0.174	
98	13.78	33.66	4.10	75	13.30	33.39	4.50	25.11	288.5	0.247	
146	10.78	33.46	4.15	100	13.80	33.66	4.09	25.21	279.1	0.318	
194	8.60	33.64	3.73	150	10.23	33.46	4.14	25.73	230.4	0.446	
290	7.68	34.02	1.55	200	8.54	33.67	3.63	26.17	189.0	0.551	
387	6.80	34.05	1.18	250	8.03	33.92	2.09	26.44	163.8	0.639	
581	5.22	34.18	0.47	300	7.60	34.03	1.49	26.59	150.3	0.717	
872	4.03	34.36	0.34	400	6.71	34.05	1.14	26.73	138.1	0.861	
1168	3.29	34.47	0.48	500	5.84	34.11	0.71	26.89	123.5	0.992	
				600	5.13	34.20	0.45	27.05	109.0	1.108	
				700	4.66	34.26	0.36	27.15	99.6	1.213	
				800	4.29	34.32	0.34	27.24	92.1	1.308	
				1000	3.64	34.42	0.39	27.38	78.9	1.479	

CREST; June 6, 1949; 0511 GCT; 35°21'N, 130°09'W; sounding, missing; wind, 315°, force 3; weather, overcast; sea, moderate; wire angle, 5°. 610

0	15.80	33.04	4.17	0	15.80	33.04	4.17	24.31	362.9	0.000	
10	15.76	33.02	4.20	10	15.76	33.02	4.20	24.30	363.8	0.036	
25	15.72	33.04	4.16	20	15.73	33.04	4.17	24.32	361.8	0.073	
48	14.16	33.03	4.57	30	15.60	33.04	4.17	24.35	359.5	0.109	
73	12.43	33.10	4.45	50	14.06	33.03	4.59	24.67	329.2	0.178	
97	12.36	33.15	4.20	75	12.41	33.11	4.44	25.06	292.7	0.255	
146	11.17	33.44	3.94	100	12.33	33.16	4.20	25.12	288.0	0.328	
194	8.69	33.60	3.62	150	11.09	33.45	3.93	25.57	245.7	0.461	
293	7.48	33.93	2.09	200	8.56	33.62	3.55	26.13	193.0	0.571	
391	6.68	34.07	0.88	250	7.84	33.79	2.80	26.37	170.7	0.662	
588	4.89	34.36	0.51	300	7.40	33.94	2.00	26.55	154.1	0.743	
886	3.98	34.13	0.26	400	6.59	34.08	0.87	26.77	134.1	0.887	
1186	3.24	34.43	0.52	500	5.59	34.24	0.64	27.02	110.7	1.010	
				600	4.83	34.37	0.52	27.22	92.7	1.111	
				700	4.55	34.39	0.41	27.26	88.7	1.202	
				800	4.23	34.40	0.32	27.31	85.4	1.289	
				1000	3.63	34.42	0.30	27.38	78.8	1.453	

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

701 CREST; June 10, 1949; 0334 GCT; 35°30'N, 122°12'W; sounding, missing; wind, missing, force 5; weather, haze; sea, rough; wire angle, 35°.

0	14.14r	33.07	4.62	0	14.5	33.07	4.62	24.60	334.7	0.000
9	14.01r	33.08	4.63	10	14.4	33.08	4.64	24.65	330.4	0.033
21	13.53r	33.13	5.70	20	14.1	33.13	4.73	24.74	321.8	0.066
41	12.91	33.17	4.95	30	13.8	33.16	4.86	24.84	313.2	0.098
61	10.53	33.10	3.89	50	11.50	33.15	4.70	25.27	272.5	0.156
80	9.38	33.33	3.84	75	9.86	33.25	3.87	25.63	238.5	0.220
120	8.78	33.71	2.76	100	9.13	33.53	3.44	25.97	206.7	0.276
160	8.32	33.92	1.95	150	8.44	33.88	2.05	26.35	171.3	0.370
243	7.20	33.98	1.69	200	7.81	33.96	1.83	26.51	156.8	0.452
326	6.54	34.04	1.10	250	7.14	33.98	1.65	26.62	146.9	0.528
495	5.04	34.15	0.64	300	6.75	34.02	1.29	26.70	139.2	0.599
754	4.42	34.33	0.32	400	5.79	34.09	0.86	26.88	123.1	0.731
1135	3.46	34.45	0.55	500	5.03	34.16	0.64	27.03	109.7	0.847
				600	4.79	34.23	0.46	27.11	102.6	0.953
				700	4.57	34.30	0.34	27.19	95.7	1.052
				800	4.27	34.36	0.32	27.27	88.9	1.144
				1000	3.72	34.43	0.44	27.38	79.1	1.313

706 CREST; June 2, 1949; 0201 GCT; 34°23'N, 125°35'W; sounding, missing; wind, 020°, force 6; weather, partly cloudy; sea, rough; wire angle, 36°.

0	15.95	33.06	5.32	0	15.95	33.06	5.32	24.26	366.9	0.000
8	15.95	33.04	5.32	10	15.95	33.04	5.36	24.27	366.5	0.037
20	15.75	33.06	5.53	20	15.75	33.06	5.53	24.33	360.7	0.073
41	13.94	33.08	5.68	30	14.97	33.07	5.62	24.51	344.1	0.108
61	12.88	33.03	5.75	50	13.48	33.07	5.73	24.83	314.4	0.174
80	11.95	32.99	5.74	75	12.13	33.00	5.74	25.04	295.3	0.250
119	11.50	33.25	5.37	100	11.81	33.06	5.62	25.14	285.6	0.323
156	9.21	33.39	4.36	150	9.35	33.37	4.62	25.81	222.9	0.450
232	8.27	33.86	2.94	200	8.67	33.73	3.45	26.20	186.6	0.553
307	7.22	34.00	2.28	250	8.04	33.91	2.74	26.43	164.8	0.640
458	5.65	34.05	1.04	300	7.31	34.00	2.35	26.61	148.5	0.718
687	4.46	34.23	0.37	400	6.16	34.04	1.43	26.80	131.6	0.858
1049	3.53	34.43	0.58	500	5.39	34.08	0.88	26.92	120.0	0.984
				600	4.84	34.16	0.53	27.05	108.6	1.099
				700	4.41	34.24	0.38	27.16	98.6	1.202
				800	4.08	34.31	0.40	27.25	90.4	1.297
				1000	3.57	34.41	0.55	27.38	78.8	1.466

707 CREST; June 1, 1949; 1916 GCT; 34°07'N, 126°20'W; sounding, missing; wind, 355°, force 5; weather, partly cloudy; sea, rough; wire angle, 21°.

0	16.40	33.12	4.95	0	16.40	33.12	4.95	24.23	370.0	0.000
10	16.38	33.30	5.02	10	16.38	33.30	5.02	24.37	356.9	0.036
23	15.81	33.40	4.93	20	16.25	33.39	4.98	24.47	347.5	0.072
46	14.14	33.38	5.02	30	14.87	33.40	4.93	24.79	317.9	0.105
69	13.88	33.51	4.96	50	14.09	33.41	5.02	24.96	302.0	0.167
92	13.59	33.51	4.90	75	13.80	33.51	4.93	25.10	289.6	0.241
137	12.34	33.69	4.55	100	13.45	33.52	4.90	25.18	282.7	0.312
172	9.29	-	-	150	11.65	33.73	4.46	25.69	234.8	0.442
282	7.34	34.01	3.03	200	8.56	33.86	3.93	26.32	175.1	0.544
497	5.24	34.13	0.80	250	7.75	33.96	3.39	26.52	156.9	0.627
811	3.97	34.38	0.38	300	7.11	34.02	2.81	26.65	144.3	0.703
1232	3.16	34.51	0.94	400	6.02	34.08	1.66	26.84	126.9	0.838
				500	5.23	34.13	0.78	26.98	114.3	0.958
				600	4.73	34.22	0.49	27.11	102.7	1.067
				700	4.32	34.30	0.40	27.22	92.8	1.164
				800	4.00	34.37	0.38	27.31	85.0	1.254
				1000	3.54	34.45	0.59	27.42	75.3	1.414

CREST; June 1, 1949; 1253 GCT; 33°53'N, 127°01'W; sounding, missing; wind, 315°, force 3; weather, partly cloudy; sea, rough; wire angle, 12°. 708

OBSERVED					INTERPOLATED					COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m
0	16.72	33.17	5.30		0	16.72	33.17	5.30		24.20	373.3	0.000
10	16.82	33.13	5.29		10	16.82	33.13	5.29		24.14	378.8	0.038
24	16.05	33.62	5.32		20	16.80	33.41	5.31		24.36	358.1	0.074
47	15.59	33.64	5.37		30	15.96	33.63	5.33		24.72	324.2	0.109
70	13.98	33.48	5.48		50	15.46	33.64	5.38		24.84	313.1	0.172
94	13.87	33.55	5.50		75	13.95	33.48	5.48		25.04	294.6	0.248
139	13.00	33.66	5.35		100	13.87	33.56	5.50		25.12	288.0	0.321
184	9.56	33.62	4.74		150	10.99	33.66	5.26		25.75	228.4	0.450
274	7.73	33.96	2.99		200	9.20	33.65	4.45		26.05	200.7	0.558
364	6.54	33.99	2.22		250	8.20	33.92	3.35		26.42	166.4	0.649
543	4.90	34.11	0.79		300	7.39	33.97	2.72		26.58	151.7	0.728
815	4.06	34.38	0.37		400	6.13	34.00	1.88		26.77	134.3	0.871
1107	3.37	34.46	0.71		500	5.21	34.06	1.07		26.93	119.3	0.998
					600	4.66	34.17	0.58		27.08	105.7	1.111
					700	4.33	34.28	0.41		27.20	94.6	1.211
					800	4.10	34.37	0.37		27.30	86.1	1.301
					1000	3.63	34.44	0.53		27.40	77.4	1.464

CREST; June 1, 1949; 0635 GCT; 33° 36'N, 127°47'W; sounding, missing; wind, 345°, force 1; weather, partly cloudy; sea, moderate; wire angle, 0°. 709

0	17.26	33.35	4.97		0	17.26	33.35	4.97		24.21	372.4	0.000
10	17.11	33.46	5.05		10	17.11	33.46	5.05		24.33	361.3	0.037
25	15.71	33.42	5.23		20	16.73	33.42	5.18		24.38	355.9	0.072
50	15.08	33.57	5.33		30	15.65	33.47	5.23		24.67	329.2	0.107
75	14.25	33.58	5.40		50	15.08	33.57	5.33		24.87	310.5	0.171
100	14.18	33.64	5.43		75	14.25	33.58	5.40		25.06	293.6	0.246
150	12.96	33.69	5.05		100	14.18	33.64	5.43		25.12	288.3	0.319
200	9.46	33.66	4.49		150	12.96	33.69	5.05		25.41	261.8	0.456
297	7.60	34.02	3.24		200	9.46	33.66	4.49		26.02	204.0	0.573
396	6.30	33.96	1.80		250	8.43	33.92	3.84		26.38	169.7	0.666
593	4.84	34.14	0.61		300	7.56	34.02	3.17		26.59	150.4	0.746
888	3.74	34.40	0.37		400	6.25	33.96	1.76		26.72	138.7	0.891
1185	3.22	-	0.85		500	5.40	34.04	0.94		26.89	123.2	1.022
					600	4.80	34.15	0.60		27.05	108.8	1.138
					700	4.36	34.26	0.45		27.18	96.4	1.241
					800	4.00	34.34	0.39		27.28	87.2	1.332
					1000	3.49	(34.44)	0.52		(27.41)	(75.7)	(1.495)

CREST; June 1, 1949; 0045 GCT; 33°18'N, 128°28'W; sounding, missing; wind, 315°, force 3; weather, partly cloudy; sea, moderate; wire angle, 15°. 710

0	17.13	33.40	5.22		0	17.13	33.40	5.22		24.28	365.7	0.000
10	16.97	33.39	5.31		10	16.97	33.39	5.31		24.31	363.4	0.037
24	16.83	33.87	5.31		20	16.88	33.50	5.30		24.41	353.5	0.072
48	15.25	33.77	5.33		30	16.72	33.87	5.34		24.74	323.3	0.106
72	15.19	33.89	5.29		50	15.24	33.77	5.31		24.99	299.2	0.168
96	15.27	33.98	5.04		75	15.20	33.90	5.29		25.10	289.3	0.242
144	12.05	33.55	5.34		100	15.25	33.98	5.05		25.15	285.6	0.314
191	9.56	33.61	4.50		150	11.50	33.54	5.32		25.57	246.0	0.447
286	7.94	33.89	3.71		200	9.38	33.67	4.44		26.04	202.0	0.559
380	6.58	34.00	2.29		250	8.51	33.83	4.00		26.30	177.8	0.654
570	4.91	34.20	0.73		300	7.76	33.91	3.58		26.48	161.5	0.738
854	3.79	34.38	0.33		400	6.35	34.02	1.98		26.76	135.7	0.887
1146	3.26	34.54	0.73		500	5.38	34.13	1.07		26.96	116.1	1.013
					600	4.79	34.22	0.61		27.10	103.3	1.123
					700	4.37	34.29	0.39		27.20	94.4	1.221
					800	3.98	34.35	0.32		27.29	86.3	1.312
					1000	3.49	34.46	0.45		27.43	74.1	1.472

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

801

CREST; May 28, 1949; 1631, 1700 GCT; 33°50'N, 120°37'W; sounding, missing; wind, 340°, force 2; weather, overcast; sea, rough; wire angle, 20°, 22°.

0	14.13	33.30	5.47	0	14.13	33.30	5.47	24.87	309.6	0.000
8	14.09	33.28	5.43	10	14.08	33.27	5.43	24.86	311.0	0.031
19	13.84	33.26	5.50	20	13.75	33.26	5.57	24.91	305.5	0.062
33	11.63	33.28	6.20u	30	11.90	33.27	6.17	25.29	270.2	0.091
56	11.00	33.54	4.85	50	11.17	33.52	5.75	25.61	239.9	0.142
79	9.57	33.57	3.23	75	9.76	33.56	3.25	25.89	213.9	0.198
103	8.81	33.73	4.04	100	8.85	33.69	3.99	26.14	190.5	0.249
195	7.92	34.00	1.42	150	8.30	33.90	2.60	26.39	167.7	0.338
288	6.98	34.09	2.00	200	7.87	34.01	1.42	26.54	154.2	0.419
358	6.46	34.16	1.37	250	7.35	34.07	1.70	26.66	143.1	0.493
				300	6.87	34.09	1.99	26.74	135.8	0.563
466	5.55	34.34	0.50	400	6.07	34.28	0.80	27.00	112.4	0.687
860	4.22	34.42	0.53	500	5.39	34.36	0.50	27.15	99.3	0.794
1169	3.46	34.49	0.85	600	5.00	34.38	0.50	27.21	94.0	0.890
				700	4.70	34.39	0.50	27.25	90.6	0.982
				800	4.40	34.41	0.51	27.30	86.5	1.071
				1000	3.87	34.45	0.65	27.38	70.5	1.227

802

CREST; May 29, 1949; 0040 GCT; 33°32'N, 121°24'W; sounding, missing; wind, 225°, force 1; weather, cloudy; sea, indeterminate; wire angle, 0°.

0	15.65	33.30	5.70	0	15.65	33.30	5.70	24.54	340.7	0.000
10	14.32	33.28	5.55	10	14.32	33.28	5.55	24.81	315.2	0.033
25	13.52	33.48	5.76	20	13.80	33.40	5.65	25.01	296.3	0.063
50	10.60	33.52	4.90	30	12.38	33.49	5.70	25.36	263.2	0.091
75	9.60	33.60	3.86	50	10.60	33.52	4.90	25.71	230.0	0.141
100	8.98	33.77	3.03	75	9.60	33.60	3.86	25.95	208.5	0.196
150	8.43	33.98	1.53	100	8.98	33.77	3.03	26.18	186.6	0.245
200	7.92	34.05	1.80	150	8.43	33.98	1.53	26.43	163.3	0.332
299	6.84	34.13	1.22	200	7.92	34.05	1.80	26.56	151.7	0.412
398	6.30	34.20	0.68	250	7.32	34.10	1.60	26.69	140.5	0.484
596	5.29	34.38	0.33	300	6.83	34.13	1.22	26.78	132.4	0.553
894	4.12	34.40	0.46	400	6.29	34.20	0.68	26.91	121.6	0.679
1194	3.41	34.54	0.78	500	5.76	34.31	0.45	27.06	107.7	0.794
				600	5.27	34.38	0.33	27.18	97.4	0.897
				700	4.83	34.39	0.35	27.23	92.4	0.992
				800	4.44	34.40	0.40	27.29	87.8	1.082
				1000	3.83	34.44	0.57	27.38	79.7	1.249

803

CREST; May 29, 1949; 0759 GCT; 33°19'N, 122°05'W; sounding, missing; wind, 315°, force 1; weather, partly cloudy; sea, rough; wire angle, 23°.

0	14.92	33.13	5.83	0	14.92	33.13	5.83	24.57	338.0	0.000
9	14.60	32.97	5.80	10	14.59	32.97	5.80	24.52	343.1	0.034
23	13.92	33.13	5.76	20	14.05	33.12	5.76	24.74	321.8	0.067
46	13.32	33.21	6.20	30	13.75	33.17	5.75	24.85	312.3	0.099
68	12.16	33.22	6.07	50	13.15	33.21	6.23	25.00	298.3	0.160
91	11.18	33.26	5.45	75	11.85	33.23	5.95	25.27	273.4	0.231
134	9.29	33.57	3.67	100	10.65	33.29	5.24	25.53	248.9	0.297
178	8.98	33.91	2.38	150	9.17	33.84	3.07	26.20	185.4	0.406
267	7.45	33.96	3.69	200	8.57	33.92	2.45	26.36	171.0	0.494
356	6.82	34.13	1.14	250	7.66	33.95	3.58	26.52	156.5	0.576
534	5.59	34.31	0.40	300	7.20	34.00	3.31	26.63	146.7	0.652
800	4.43	34.38	0.37	400	6.50	34.20	0.75	26.88	124.1	0.788
1067	3.64	34.51	0.70	500	5.82	34.29	0.45	27.04	110.1	0.905
				600	5.23	34.34	0.36	27.15	99.9	1.010
				700	4.79	34.36	0.34	27.22	93.9	1.107
				800	4.43	34.38	0.37	27.27	89.2	1.198
				1000	3.82	34.48	0.60	27.41	76.6	1.364

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
CREST; May 29, 1949; 1403 GCT; 32°55'N, 122°47'W; sounding, missing; wind, missing; weather, partly cloudy; sea, slight; wire angle, 0°.												804
0	15.54	33.22	5.60		0	15.54	33.22	5.60		24.50	344.2	0.000
10	15.06	33.17	5.50		10	15.06	33.17	5.50		24.57	338.2	0.034
25	14.43	33.24	5.61		20	14.65	33.24	5.53		24.71	325.0	0.067
50	13.15	33.24	5.92		30	14.20	33.24	5.68		24.81	316.1	0.099
75	12.13	33.28	5.67		50	13.15	33.24	5.92		25.02	296.2	0.161
100	10.57	33.40	4.82		75	12.13	33.28	5.67		25.25	275.0	0.232
149	9.36	33.66	3.54		100	10.57	33.40	4.82		25.63	239.5	0.296
198	8.40	33.95	2.44		150	9.35	33.67	3.50		26.04	200.6	0.407
296	6.80	33.98	2.11		200	8.37	33.96	2.42		26.42	164.9	0.498
395	5.90	34.05	1.15		250	7.44	33.97	2.29		26.57	151.7	0.576
594	4.87	34.20	0.42		300	6.75	33.98	2.09		26.67	142.4	0.650
890	3.90	34.42	0.47		400	5.87	34.06	1.11		26.85	126.3	0.785
1186	3.38	34.51	0.84		500	5.33	34.14	0.66		26.98	114.9	0.905
					600	4.85	34.21	0.42		27.09	104.9	1.015
					700	4.45	34.30	0.42		27.21	94.3	1.115
					800	4.13	34.38	0.44		27.30	85.7	1.205
					1000	3.64	34.46	0.57		27.41	76.7	1.367
CREST; May 29, 1949; 2031, 2055, 2117 GCT; 32°38'N, 123°32'W; sounding, missing; wind, 090°, force 1; weather, cloudy; sea, moderate; wire angle, 0°, 0°, 0°.												805
0	16.53	33.26	5.60		0	16.53	33.26	5.60		24.31	363.1	0.000
10	15.58	33.28	5.52		10	15.58	33.28	5.52		24.54	340.9	0.035
25	15.51	33.30	5.64		20	15.53	33.30	5.57		24.57	338.5	0.069
50	15.03	33.33	5.80		30	15.47	33.31	5.66		24.59	337.1	0.103
75	13.77	33.37	5.86		50	15.03	33.33	5.80		24.70	327.0	0.169
100	13.69	33.51	5.59		75	13.77	33.37	5.86		24.99	299.4	0.248
150	10.81	33.40	4.96		100	13.69	33.51	5.59		25.12	287.9	0.321
200	9.06	33.73	3.42		150	10.81	33.40	4.96		25.59	244.4	0.454
300	7.90	34.13	2.16		200	9.06	33.73	3.42		26.14	192.4	0.564
					250	8.46	34.04	2.74		26.47	161.3	0.652
400	6.63	34.10	1.31		300	7.90	34.13	2.16		26.63	147.3	0.729
600	5.14	34.24	0.51		400	6.63	34.10	1.31		26.78	133.3	0.869
					500	5.78	34.14	0.85		26.92	120.6	0.996
900	4.03	34.43	0.45		600	5.14	34.24	0.51		27.08	106.1	1.109
1200	3.30	34.51	0.73		700	4.73	34.33	0.47		27.20	95.4	1.210
					800	4.37	34.39	0.46		27.29	87.7	1.302
					1000	3.75	34.46	0.55		27.40	77.2	1.466
CREST; May 30, 1949; 0314, 0350 GCT; 32°19'N, 124°13'W; sounding, missing; wind, 360°, force 3; weather, cloudy; sea, rough; wire angle, 32°, 40°.												806
0	16.55	33.37	5.41		0	16.55	33.37	5.41		24.39	355.1	0.000
9	15.69	33.24	5.71		10	15.63	33.24	5.71		24.50	345.0	0.035
22	14.97	33.26	5.27		20	15.10	33.26	5.33		24.63	332.7	0.069
43	13.38	33.21	5.38		30	14.44	33.25	5.30		24.76	320.1	0.102
64	12.61	33.13	5.61		50	12.93	33.19	5.47		25.03	295.6	0.163
84	12.54	33.28	5.46		75	12.57	33.21	5.58		25.11	288.3	0.236
125	11.42	33.35	5.15		100	12.40	33.32	5.45		25.23	277.6	0.307
166	9.70	33.60	3.74		150	10.25	33.41	4.51		25.69	234.4	0.435
248	8.35	34.02	2.15		200	9.04	33.90	2.86		26.27	179.5	0.539
328	7.38	34.16	1.26		250	8.33	34.03	2.14		26.49	160.1	0.623
					300	7.69	34.12	1.55		26.65	145.0	0.700
494	6.38	34.27	0.36		400	6.86	34.22	0.77		26.84	127.6	0.835
765	5.02	34.38	0.32		500	6.37	34.27	0.35		26.95	118.5	0.958
					600	5.90	34.32	0.33		27.05	110.1	1.073
					700	5.39	34.36	0.32		27.15	101.5	1.179

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
807	CREST; May 30, 1949; 1014, 1045, 1130 GCT; 32°04'N, 124°56'W; sounding, missing; wind, 360°, force 3; weather, overcast: sea, moderate; wire angle, 22°, 18°, 27°.											
0	16.40r	33.33	5.22		0	(16.65)	33.33	5.22		(24.34)	(360.2)	0.000
10	16.64	33.28	5.29		10	16.64	33.28	5.29		24.30	364.1	0.036
23	15.41	33.31	5.34		20	16.25	33.31	5.32		24.41	353.5	0.072
47	14.35	33.28	5.43		30	15.00	33.30	5.36		24.68	328.0	0.106
70	12.94	33.37	5.81		50	14.25	33.28	5.45		24.83	314.7	0.170
94	11.50	33.40	4.95		75	12.50	33.38	5.78		25.26	274.3	0.244
140	9.40	33.57	3.87		100	11.17	33.41	4.74		25.53	249.0	0.309
188	8.60	33.82	3.16		150	9.17	33.70	3.76		26.09	195.6	0.421
283	7.42	34.04	1.99		200	8.44	33.86	3.00		26.34	173.5	0.513
379	6.18	33.21r	-		250	7.83	33.97	2.35		26.51	157.2	0.595
579	5.03	34.27	0.44		300	7.17	34.08	1.84		26.69	140.8	0.670
					400	6.00	34.19	1.12		26.93	118.4	0.800
804	4.18	34.40	0.44		500	5.45	34.24	0.64		27.04	109.0	0.914
					600	4.94	34.28	0.44		27.13	100.8	1.018
1128	3.40	34.51	0.76		700	4.54	34.33	0.44		27.22	93.1	1.115
					800	4.20	34.39	0.44		27.30	85.8	1.205
					1000	3.68	34.47	0.64		27.42	75.5	1.366
808	CREST; May 30, 1949; 1843, 1912 GCT; 31°48'N, 125°39'W; sounding, missing; wind, 330°, force 4; weather, partly cloudy; sea, rough; wire angle, 25°, 37°.											
0	17.02	33.40	5.07		0	17.02	33.40	5.07		24.30	363.6	0.000
12	17.08	33.46	5.30		10	17.10	33.46	5.28		24.33	361.2	0.036
25	15.61	33.46	5.30		20	15.77	33.46	5.30		24.63	332.4	0.071
38	15.49	33.71	-		30	15.57	33.48	5.29		24.70	326.9	0.104
60	14.37	33.62	5.20		50	14.75	33.67	5.25		25.02	296.3	0.166
82	14.16	33.60	5.27		75	14.20	33.61	5.24		25.09	290.3	0.240
103	14.16	33.66	5.23		100	14.15	33.66	5.24		25.14	286.2	0.312
146	11.60	33.57	4.84		150	11.00	33.57	4.81		25.68	235.2	0.442
					200	9.00	33.79	4.15		26.19	187.1	0.548
185	9.32	33.66	4.31		250	8.00	33.92	3.61		26.45	163.5	0.635
266	7.69	33.95	3.43		300	7.17	33.99	3.05		26.62	147.3	0.713
466	5.39	34.11	1.09		400	5.94	34.06	1.75		26.84	127.2	0.850
663	4.56	34.27	0.36		500	5.22	34.13	0.90		26.98	114.3	0.970
1000	3.73	34.49	0.71		600	4.79	34.22	0.49		27.10	103.6	1.079
					700	4.45	34.30	0.36		27.21	94.2	1.178
					800	4.20	34.37	0.39		27.29	87.3	1.269
					1000	3.73	34.49	0.71		27.43	74.7	1.429
809	CREST; May 31, 1949; 0101 GCT; 31°32'N, 126°22'W; sounding, missing; wind, 360°, force 3; weather, partly cloudy; sea, moderate; wire angle, 5°.											
0	17.42	33.49	5.45		0	17.42	33.49	5.45		24.28	365.8	0.000
10	17.42	33.42	5.10		10	17.42	33.42	5.10		24.23	370.8	0.037
25	16.50	33.48	5.45		20	17.00	33.45	5.40		24.35	359.8	0.073
50	15.57	33.60	5.46		30	16.29	33.52	5.45		24.56	339.5	0.108
75	14.82	33.58	5.42		50	15.57	33.60	5.46		24.79	318.6	0.174
99	14.34	33.62	5.34		75	14.82	33.58	5.42		24.94	305.0	0.252
148	11.86	33.39	4.86		100	14.33	33.62	5.33		25.07	292.8	0.327
198	9.34	33.64	4.16		150	11.77	33.39	4.86		25.41	261.7	0.465
297	7.79[a]	33.98	3.43		200	9.30	33.69	4.14		26.06	199.3	0.581
396	6.54	34.02	1.84		250	8.47	33.92	3.76		26.38	170.5	0.673
594	5.28	34.22	0.47		300	7.75	33.98	3.40		26.53	156.2	0.755
891	4.17	34.38	0.42		400	6.52	34.02	1.82		26.74	137.7	0.902
1188	3.39	34.51	0.81		500	5.81	34.12	1.02		26.90	122.5	1.032
					600	5.25	34.22	0.46		27.05	109.1	1.148
					700	4.84	34.28	0.44		27.15	100.4	1.252
					800	4.47	34.33	0.42		27.23	93.3	1.349
					1000	3.84	34.43	0.55		27.37	80.5	1.523

a) Left thermometer reading of 7.29° rejected.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	
CREST; May 31, 1949; 0746, 0805, 0837 GCT; 31°14'N, 127°03'W; sounding, missing; wind, 020°, force 2; weather, partly cloudy; sea, slight; wire angle, 0°, 0°, missing.													810
0	17.59	33.60	3.25r		0	17.59	33.60	(5.35)		24.32	361.7	0.000	
10	17.53	33.55	5.35		10	17.53	33.55	5.35		24.30	364.3	0.036	
					20	16.97	33.57	5.40		24.44	350.8	0.072	
25	16.67	33.57	5.43		30	16.52	33.57	5.52		24.55	340.7	0.107	
50	15.55	33.48	6.36		50	15.55	33.48	6.36		24.70	326.8	0.173	
75	14.23	33.35	5.71		75	14.23	33.35	5.71		24.89	309.7	0.253	
100	13.94	33.39	5.85		100	13.94	33.39	5.85		24.98	301.7	0.329	
					150	11.70	33.42	5.04		25.44	258.5	0.469	
150	11.70	33.42	5.04		200	9.66	33.60	4.34		25.94	211.5	0.587	
200	9.66	33.60	4.34		250	8.50	33.80	3.81		26.28	179.8	0.685	
300	7.77	33.96	3.20		300	7.77	33.96	3.20		26.51	157.9	0.769	
400	6.70	34.03	2.02		400	6.70	34.03	2.02		26.72	139.4	0.918	
600	5.27	34.18	0.46		500	5.92	34.11	1.03		26.88	124.6	1.050	
900	4.10	34.40	0.50		600	5.27	34.18	0.46		27.02	112.4	1.168	
					700	4.82	34.25	0.46		27.12	102.5	1.276	
1200	3.37	34.49	0.94		800	4.44	34.33	0.48		27.23	93.1	1.374	
					1000	3.80	34.45	0.61		27.39	78.5	1.545	
HORIZON; May 28, 1949; 0635 GCT; 32°40'N, 118°10'W; sounding, missing; wind, 270°, force 2; weather, overcast; sea, slight; wire angle, 11°.													901
0	17.00	33.64	5.10		0	17.00	33.64	5.10		24.49	345.5	0.000	
10	17.03	33.66	5.55		10	17.03	33.66	5.55		24.50	345.0	0.035	
24	12.71	33.51	5.97		20	13.60	33.53	5.91		25.15	282.9	0.066	
48	10.84	33.57	4.39		30	12.26	33.51	5.85		25.41	259.1	0.093	
73	9.90	33.77	3.26		50	10.74	33.61	4.30		25.76	225.7	0.141	
98	9.66	33.82	2.88		75	9.88	33.77	3.18		26.03	200.5	0.195	
146	8.79	34.00	2.53		100	9.63	33.83	2.82		26.12	192.4	0.244	
195	8.34	34.14	1.82		150	8.73	34.02	2.48		26.42	165.2	0.333	
293	7.44	34.25	1.14		200	8.31	34.14	1.78		26.57	150.8	0.413	
392	6.78	34.33	-		250	7.82	34.21	1.37		26.70	139.4	0.485	
516	5.56	34.27	0.27		300	7.39	34.26	1.13		26.81	130.2	0.553	
881	4.41	34.40	0.51		400	6.73	34.33	0.63		26.95	117.6	0.676	
1174	3.56	34.18r	1.11r		500	5.65	34.27	0.28		27.04	109.3	0.790	
					600	5.27	34.28	0.28		27.10	104.9	0.897	
					700	4.96	34.32	0.32		27.16	99.1	0.999	
					800	4.65	34.36	0.40		27.23	93.3	1.095	
					1000	4.04	(34.46)	-		(27.38)	(80.6)	(1.269)	
HORIZON; May 28, 1949; 1255 GCT; 32°15'N, 118°59'W; sounding, missing; wind, 315°, force 2; weather, cloudy; sea, slight; wire angle, 15°.													902
0	14.60	33.64	5.83		0	14.60	33.64	5.83		25.03	294.2	0.000	
9	14.78	33.62	6.02		10	14.77	33.62	6.04		24.98	299.3	0.030	
23	14.10	33.60	6.10		20	14.25	33.60	6.09		25.07	290.7	0.059	
47	10.48	33.87	4.26		30	13.29	33.60	5.59		25.27	271.9	0.087	
71	9.48	33.80	2.94		50	10.44	33.87	3.93		26.01	201.6	0.135	
95	9.06	33.98	2.34		75	9.37	33.80	2.78		26.14	190.1	0.184	
143	8.84	34.02	1.97		100	9.03	34.00	2.28		26.35	170.3	0.229	
192	8.38	34.14	1.56		150	8.80	34.03	1.92		26.41	165.5	0.312	
287	7.48	34.25	0.99		200	8.30	34.16	1.51		26.59	149.1	0.392	
383	6.84	34.27	0.66		250	7.79	34.22	1.19		26.71	138.3	0.463	
575	5.82	34.36	0.49		300	7.39	34.25	0.92		26.80	131.0	0.531	
863	4.46	34.47	0.39		400	6.73	34.27	0.64		26.90	122.2	0.657	
					500	6.19	34.32	0.52		27.01	112.5	0.775	
					600	5.68	34.37	0.44		27.12	103.5	0.883	
					700	5.16	34.41	0.41		27.21	94.9	0.982	
					800	4.70	34.45	0.38		27.30	87.2	1.073	
					1000	(3.99)	(34.50)	-		(27.41)	(77.0)	(1.237)	

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4906

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
903	HORIZON; May 28, 1949; 1808 GCT; 32°03'N, 119°32'W; sounding, missing; wind, 240°, force 3; weather, cloudy; sea, moderate; wire angle, 11°.											
0	15.30	33.48	5.25		0	15.30	33.48	5.25		24.75	320.5	0.000
10	15.22	33.46	5.34		10	15.22	33.46	5.34		24.76	320.1	0.032
25	14.38	33.39	5.80		20	14.96	33.40	5.77		24.77	319.6	0.064
49	11.86	33.39	5.60		30	13.70	33.39	5.77		25.03	295.2	0.095
73	10.97	33.44	5.50		50	11.87	33.39	5.59		25.39	261.3	0.150
97	10.14	33.57	3.90		75	10.84	33.45	5.48		25.62	239.9	0.213
146	9.08	33.91	2.73		100	10.07	33.60	3.82		25.87	216.4	0.270
195	8.52	34.07	-		150	9.04	33.93	2.66		26.30	176.4	0.368
292	7.51	34.18	1.29		200	8.47	34.08	2.08		26.50	157.6	0.451
389	6.82	34.25	0.76		250	7.92	34.14	1.63		26.63	145.9	0.528
584	5.82	34.34	0.47		300	7.44	34.19	1.25		26.74	136.2	0.598
876	4.40	34.43	0.45		400	6.77	34.26	0.72		26.89	123.5	0.728
1168	3.40	34.07r	1.81r		500	6.26	34.31	0.55		27.00	114.0	0.846
					600	5.73	34.35	0.46		27.09	105.8	0.956
					700	5.22	34.38	0.45		27.18	98.0	1.058
					800	4.74	34.41	0.45		27.26	90.9	1.153
					1000	3.88	(34.46)	-		(27.39)	(78.6)	(1.323)
904	HORIZON; May 28, 1949; 2343 GCT; 31°44'N, 120°13'W; sounding, missing; wind, 270°, force 1; weather, partly cloudy; sea, slight; wire angle, 30°.											
0	16.75	33.48	4.43		0	16.75	33.48	4.43		24.43	351.4	0.000
8	15.88	33.44	5.28		10	16.04	33.44	5.28		24.56	339.5	0.035
21	14.93	-	-		20	14.95	33.44	5.40		24.80	316.6	0.067
42	14.62	33.46	5.50		30	14.76	33.45	5.47		24.85	311.9	0.099
63	12.63	33.42	5.43		50	14.01	33.45	5.48		25.01	297.6	0.160
84	11.34	33.40	5.10		75	11.64	33.41	5.27		25.44	256.7	0.229
124	9.48	33.64	3.48		100	10.50	33.43	4.62		25.66	236.1	0.291
165	9.26	33.98	2.84		150	9.37	33.94	2.98		26.25	181.1	0.395
245	8.07	34.09	2.09		200	8.61	34.02	2.55		26.43	164.2	0.481
326	7.40	34.22	1.20		250	7.98	34.10	2.05		26.59	149.8	0.560
495	6.22	34.29	0.57		300	7.58	34.19	1.48		26.72	138.2	0.632
766	4.86	34.42	0.47		400	6.84	34.25	0.85		26.87	125.2	0.763
1049	3.86	34.34r	0.61		500	6.19	34.29	0.57		26.99	114.7	0.883
					600	5.65	34.34	0.48		27.10	105.4	0.993
					700	5.18	34.39	0.47		27.19	96.6	1.094
					800	4.73	(34.43)	0.48		(27.28)	(89.2)	(1.187)
					1000	4.05	(34.48)	0.58		(27.39)	(79.2)	(1.355)
905	HORIZON; May 29, 1949; 0523 GCT; 31°22'N, 120°53'W; sounding, missing; wind, 280°, force 1; weather, clear; sea, slight; wire angle, 12°.											
0	16.02	33.44	5.70		0	16.02	33.44	5.70		24.57	338.3	0.000
9	15.67	33.44	5.60		10	15.66	33.44	5.60		24.65	331.0	0.034
23	15.44	33.48	5.74		20	15.50	33.46	5.64		24.70	326.3	0.066
47	13.77	33.39	5.94		30	15.00	33.49	5.82		24.83	314.2	0.098
71	12.47	33.40	5.52		50	13.63	33.39	5.93		25.04	294.5	0.159
95	11.47	33.42	5.28		75	12.36	33.41	5.47		25.31	269.5	0.230
143	9.56	33.66	3.69		100	11.18	33.48	5.02		25.58	243.9	0.294
190	8.66	33.87	3.04		150	9.41	33.70	3.60		26.05	199.7	0.405
286	7.40	34.09	2.14		200	8.53	33.90	2.95		26.35	171.9	0.498
383	6.44	34.17	1.93		250	7.83	34.03	2.47		26.56	152.8	0.579
578	5.43	34.27	1.02		300	7.26	34.10	2.07		26.70	140.4	0.652
870	4.30	34.45	0.74		400	6.33	34.18	1.88		26.88	123.5	0.785
1162	3.54	34.13r	2.06r		500	5.78	34.23	1.44		26.99	113.8	0.903
					600	5.32	34.28	0.94		27.09	105.7	1.013
					700	4.91	34.36	0.79		27.20	95.5	1.114
					800	4.54	34.42	0.74		27.29	87.5	1.205
					1000	3.88	(34.49)	-		(27.42)	(76.5)	(1.369)

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

HORIZON; May 29, 1949; 1107 GCT; 31°02'N, 121°39'W; sounding, missing; wind, 270°, force 1; weather, fog; sea, indeterminate; wire angle, 8°. 906

0	15.91	33.39	5.68	0	15.91	33.39	5.68	24.55	339.4	0.000
10	16.16	33.35	5.60	10	16.16	33.35	5.60	24.47	348.1	0.034
24	15.30	33.35	5.85	20	15.62	33.34	5.83	24.58	337.8	0.069
48	13.79	33.31	5.83	30	15.00	33.35	5.86	24.72	324.4	0.102
73	12.30	33.35	5.60	50	13.66	33.31	5.81	24.97	300.8	0.164
97	11.16	33.40	5.09	75	12.21	33.35	5.55	25.29	271.2	0.236
146	9.28	33.66	3.42	100	11.06	33.40	5.03	25.54	247.7	0.301
195	8.62	33.95	2.99	150	9.22	33.74	3.38	26.12	193.7	0.411
293	7.36	34.04	1.94	200	8.51	33.96	2.93	26.40	167.2	0.501
390	6.55	34.09	1.16	250	7.82	34.01	2.37	26.54	154.2	0.581
586	5.23	34.27	0.42	300	7.29	34.04	1.82	26.65	145.1	0.656
880	4.28	34.43	0.58	400	6.47	34.10	1.12	26.80	131.1	0.795
1178	3.46	34.05r	2.27r	500	5.73	34.19	0.68	26.97	116.3	0.918
				600	5.18	34.27	0.42	27.10	104.3	1.029
				700	4.83	34.34	0.42	27.19	96.1	1.129
				800	4.52	34.40	0.46	27.28	88.8	1.221
				1000	3.92	(34.47)	-	(27.39)	(78.5)	(1.389)

HORIZON; May 29, 1949; 1623 GCT; 30°49'N, 122°15'W; sounding, missing; wind, 215°, force 1; weather, cloudy; sea, indeterminate; wire angle, 14°. 907

0	16.65	33.51	5.76	0	16.65	33.51	5.76	24.47	347.1	0.000
10	16.72	33.47	5.05r	10	16.72	33.47	5.79	24.43	351.6	0.035
24	16.47	33.49	5.81	20	16.57	33.48	5.81	24.47	348.1	0.070
48	14.22	33.42	5.73	30	15.92	33.49	5.78	24.62	333.5	0.104
72	12.68	33.28	6.18	50	14.14	33.41	5.73	24.95	303.1	0.168
96	11.73	33.31	5.48	75	12.56	33.28	6.14	25.17	282.8	0.241
144	9.66	33.49	4.30	100	11.58	33.32	5.39	25.38	262.7	0.309
192	8.68	33.87	3.06	150	9.44	33.52	4.14	25.91	213.4	0.428
286	7.47	34.04	-	200	8.58	33.89	2.92	26.34	173.3	0.525
380	6.36	34.13	1.08	250	7.92	33.99	2.07	26.52	157.0	0.607
570	5.69	34.31	0.49	300	7.31	34.05	1.56	26.65	144.7	0.683
856	4.32	34.43	0.83	400	6.26	34.15	0.98	26.87	124.6	0.817
1150	3.49	34.02r	1.94r	500	6.03	34.24	0.62	26.97	116.3	0.938
				600	5.52	34.33	0.48	27.10	104.5	1.049
				700	4.98	34.39	0.53	27.22	94.0	1.148
				800	4.58	34.42	0.68	27.29	88.0	1.239
				1000	3.88	(34.44)	-	(27.37)	(80.2)	(1.407)

HORIZON; May 29, 1949; 2204 GCT; 30°30'N, 122°56'W; sounding, missing; wind, 225°, force 1; weather, overcast; sea, slight; wire angle, 17°. 908

0	18.25	33.44	5.70	0	18.25	33.44	5.70	24.04	388.6	0.000
9	17.01	33.44	5.71	10	17.00	33.44	5.70	24.34	360.3	0.038
23	16.03	33.37	6.05	20	16.20	33.37	6.05	24.47	348.0	0.073
47	15.26	33.37	5.85	30	15.81	33.36	6.00	24.55	340.7	0.107
70	13.50	33.33	6.21	50	15.01	33.37	5.87	24.73	323.7	0.174
92	12.32	33.31	6.14	75	13.24	33.33	6.20	25.07	292.0	0.251
140	10.38	33.37	4.99	100	11.93	33.31	6.06	25.31	269.4	0.321
186	8.86	33.82	3.56	150	9.94	33.42	4.60	25.75	228.6	0.446
279	7.60	34.05	-	200	8.57	33.87	3.36	26.32	174.8	0.546
373	6.36	34.13	1.48	250	7.62	34.01	2.68	26.57	151.4	0.628
561	5.79	34.33	0.32	300	6.96	34.07	2.15	26.71	138.4	0.701
845	4.25	34.45	0.57	400	6.25	34.15	1.24	26.87	124.6	0.831
1265	3.24	34.16r	1.29r	500	5.99	34.26	0.57	26.99	114.2	0.951
				600	5.55	34.36	0.30	27.12	102.5	1.060
				700	4.97	34.41	0.34	27.23	92.4	1.156
				800	4.47	34.44	0.48	27.31	85.1	1.246
				1000	3.77	(34.48)	-	(27.42)	(76.0)	(1.407)

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4906

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

909 HORIZON; May 30, 1949; 0356 GCT; 30°11'N, 123°37'W; sounding, missing; wind, 265°, force 1; weather, cloudy; sea, rough; wire angle, 10°.

0	17.82	33.40	5.55	0	17.82	33.40	5.55	24.12	381.3	0.000
10	16.89	33.42	5.67	10	16.89	33.42	5.67	24.35	359.3	0.037
25	16.29	33.40	5.67	20	16.50	33.41	5.66	24.43	351.8	0.073
49	14.70	33.35	5.90	30	16.12	33.39	5.72	24.50	345.3	0.108
73	12.84	33.30	6.00	50	14.60	33.35	5.92	24.81	316.7	0.174
98	12.27	33.37	5.65	75	12.70	33.30	6.00	25.16	284.0	0.249
147	9.62	33.57	4.52	100	12.25	33.38	5.61	25.30	270.3	0.318
130p	10.29	33.46	4.44r	150	9.54	33.57	4.48	25.93	211.0	0.439
238p	7.84	33.89	2.90	200	8.48	33.82	3.52	26.30	177.2	0.535
341p	6.52	34.04	1.97	250	7.62	33.92	2.74	26.50	157.9	0.619
582p	5.36	34.25	0.44	300	6.92	33.99	2.29	26.66	143.8	0.695
871p	4.12	34.40	0.60	400	6.24	34.10	1.49	26.83	128.0	0.830
1165p	3.32	34.31r	1.08	500	5.75	34.19	0.80	26.97	116.4	0.952
				600	5.27	34.26	0.44	27.08	106.2	1.064
				700	4.82	34.32	0.45	27.18	97.5	1.165
				800	4.40	34.37	0.52	27.27	89.7	1.259
				1000	3.68	(34.45)	0.80	(27.40)	(77.2)	(1.427)

910 HORIZON; May 30, 1949; 0920 GCT; 29°53'N, 124°15'W; sounding, missing; wind, 305°, force 3; weather, partly cloudy; sea, moderate; wire angle, 19°.

0	16.96	33.46	5.34	0	16.96	33.46	5.34	24.37	357.4	0.000
10	16.86	33.48	5.38	10	16.86	33.48	5.38	24.40	354.7	0.036
24	16.34	33.46	5.54	20	16.58	33.46	5.50	24.45	349.8	0.071
47	15.40	33.55	5.71	30	16.22	33.46	5.60	24.53	342.2	0.106
71	14.32	33.37	6.11	50	15.15	33.55	5.75	24.84	313.4	0.171
94	14.24	33.57	5.55	75	14.30	33.37	6.07	24.89	309.9	0.249
143	12.36	33.44	5.25	100	14.19	33.57	5.52	25.06	293.6	0.324
189	9.27	33.55	4.26	150	11.23	33.44	5.17	25.54	248.9	0.460
282	7.70[a]	34.02	3.07	200	9.00	33.60	4.12	26.04	201.3	0.573
373	6.70	34.02	1.80	250	8.13	33.88	3.47	26.40	168.2	0.665
559	5.53	34.27	0.50	300	7.46	34.03	2.80	26.62	148.2	0.744
840	4.38	34.38	0.82	400	6.48	34.02	1.52	26.74	137.1	0.886
1251	3.26	34.45	1.54	500	5.86	34.15	0.70	26.92	120.7	1.015
				600	5.34	34.31	0.50	27.11	103.6	1.128
				700	4.92	34.34	0.58	27.19	96.3	1.228
				800	4.52	34.37	0.75	27.25	91.0	1.321
				1000	3.80	34.43	1.09	27.38	79.9	1.492

911 HORIZON; May 30, 1949; 1442 GCT; 29°34'N, 124°56'W; sounding, missing; wind, 360°, force 3; weather, partly cloudy; sea, moderate; wire angle, 23°.

0	17.00	33.39	4.90	0	17.00	33.39	4.90	24.30	363.7	0.000
9	16.78	33.39	5.24	10	16.74	33.39	5.30	24.36	358.2	0.036
23	16.19	33.42	5.71	20	16.31	33.41	5.67	24.48	347.5	0.071
46	14.88	33.49	5.40	30	15.81	33.44	5.69	24.61	334.8	0.106
69	14.12	33.40	4.18	50	14.76	33.49	5.25	24.88	309.7	0.170
93	13.88	33.44	3.22	75	14.07	33.40	3.87	24.96	303.0	0.246
138	11.93	33.37	2.49	100	13.77	33.44	3.02	25.05	294.8	0.321
183	9.58	33.55	2.21	150	11.20	33.39	2.42	25.51	251.8	0.458
273	8.19	34.03	1.21	200	9.16	33.68	2.05	26.08	197.7	0.571
364	7.40	34.09	0.92	250	8.38	33.98	1.43	26.44	164.4	0.661
544	6.02	34.22	0.72	300	7.94	34.05	1.09	26.56	153.8	0.740
818	4.58	34.34	0.41	400	7.10	34.12	0.88	26.73	138.2	0.886
1104	3.60	34.40	1.48	500	6.32	34.19	0.76	26.89	123.7	1.017
				600	5.69	34.26	0.60	27.03	111.7	1.135
				700	5.17	34.30	0.45	27.12	103.2	1.243
				800	4.68	34.33	0.41	27.20	95.9	1.342
				1000	3.83	34.39	0.93	27.34	83.3	1.522

a) Middle thermometer reading of 7.81° rejected.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

HORIZON; June 2, 1949; 1800 GCT; 31°17'N, 117°00'W; sounding, missing; wind, 300°, force 1; weather, overcast; sea, very rough; wire angle, 18°. 1001

0	16.71	33.62	5.09	0	16.71	33.62	5.09	24.54	340.4	0.000
10	16.36	33.62	4.95	10	16.36	33.62	4.95	24.62	333.1	0.034
24	12.10	33.60	5.19	20	13.40	33.60	5.16	25.25	273.6	0.064
48	10.54	33.66	5.67	30	11.25	33.61	5.45	25.67	234.0	0.089
72	9.82	33.80	5.58	50	10.46	33.66	5.65	25.85	217.1	0.134
96	9.39	33.95	4.77	75	9.76	33.82	5.52	26.09	194.4	0.186
145	8.68	33.98	2.78	100	9.33	33.96	4.56	26.27	177.7	0.232
193	9.00	34.27	2.42	150	8.70	33.99	2.71	26.40	167.0	0.318
290	7.62	34.23	1.33	200	9.02	34.28	2.35	26.58	151.2	0.399
387	6.88	34.27	0.99	250	8.40	34.25	1.67	26.65	145.0	0.472
483	6.26	34.31	0.39	300	7.52	34.23	1.29	26.76	134.4	0.543
580	5.64	34.33	0.16	400	6.78	34.28	0.91	26.90	121.8	0.670
677	5.21	34.34	0.84r	500	6.15	34.32	0.32	27.02	112.0	0.788
				600	5.54	34.33	-	27.10	104.7	0.896
				700	(5.13)	(34.34)	-	(27.16)	(99.8)	(0.998)

HORIZON; June 2, 1949; 1206 GCT; 30°58'N, 117°33'W; sounding, missing; wind, 310°, force 3; weather, overcast; sea, very rough; wire angle, 33°. 1002

0	16.25	33.62	5.20	0	16.25	33.62	5.20	24.65	330.3	0.000
8	16.75	33.64	5.30	10	16.76	33.64	5.31	24.55	340.3	0.034
20	13.00	33.68	4.93	20	13.00	33.68	4.92	25.39	260.7	0.064
40	12.58	33.40	5.15	30	12.90	33.60	4.96	25.35	264.6	0.090
59	11.56	33.46	4.53	50	11.82	33.42	5.10	25.42	258.3	0.142
73	10.70	33.42	3.51	75	10.56	33.42	3.49	25.64	237.3	0.204
103	9.53	33.75	3.10	100	9.75	33.68	3.17	25.98	205.3	0.259
134	9.54	33.93	2.52	150	9.59	33.97	2.35	26.24	182.2	0.356
432	6.79	34.25	0.62	200	9.38	34.05	1.80	26.33	173.9	0.445
697	5.04	34.36	0.35	250	8.67	34.11	1.42	26.49	159.3	0.529
996	4.07	34.45	0.73	300	8.00	34.15	1.15	26.63	147.2	0.605
				400	7.03	34.23	0.74	26.83	129.1	0.743
				500	6.28	34.28	0.53	26.97	116.6	0.866
				600	5.60	34.33	0.40	27.09	105.4	0.977
				700	5.02	34.36	0.37	27.19	96.8	1.078
				800	4.56	34.40	0.37	27.27	89.1	1.171
				1000	(4.07)	(34.45)	(0.75)	(27.36)	(81.7)	(1.342)

HORIZON; June 2, 1949; 0606 GCT; 30°36'N, 118°10'W; sounding, missing; wind, 330°, force 4; weather, partly cloudy; sea, high; wire angle, 50°. 1003

0	16.20	33.68	5.19	0	16.20	33.68	5.19	24.70	325.1	0.000
6	16.53	33.66	5.26	10	16.53	33.62	5.37	24.59	336.8	0.033
16	16.53	33.57	5.58	20	16.53	33.57	5.60	24.55	340.6	0.067
30	16.53	33.64	5.61	30	16.53	33.64	5.61	24.60	335.8	0.101
43	15.21	33.57	5.67	50	14.51	33.51	5.67	24.95	303.2	0.165
54	14.38	33.48	5.60	75	11.51	33.35	4.69	25.42	258.8	0.235
70	11.74	33.35	4.94	100	11.09	33.51	4.26	25.62	240.2	0.297
86u	-	33.49	4.38	150	9.25	33.69	3.75	26.07	197.7	0.407
125	10.62	33.55	4.15	200	8.78	33.98	2.31	26.38	169.7	0.499
171	8.96	33.82	3.03	250	8.56	34.15	1.50	26.54	154.8	0.579
287	8.32	34.20	1.12	300	8.20	34.21	1.08	26.64	146.0	0.655
513	6.32	34.23	0.52	400	7.21	34.22	0.74	26.80	132.3	0.794
905	4.38	34.43	0.40	500	6.38	34.23	0.56	26.92	121.6	0.921
				600	5.77	34.26	0.44	27.02	112.8	1.039
				700	5.23	34.33	0.42	27.14	101.7	1.146
				800	4.80	34.39	0.40	27.24	93.1	1.243
				1000	(3.99)	(34.46)	-	(27.38)	(80.0)	(1.416)

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

1004 HORIZON; June 2, 1949; 0015 GCT; 30°15'N, 118°50'W; sounding, missing; wind, 330°, force 4; weather, partly cloudy; sea, high; wire angle, 47°.

0	17.10	33.60	5.15	0	17.10	33.60	5.15	24.43	350.9	0.000
6	16.79	33.64	4.77	10	16.79	33.64	4.81	24.54	341.1	0.035
17	16.79	33.57	4.98	20	16.79	33.57	5.02	24.48	346.7	0.069
34	16.57	33.57	5.39	30	16.68	33.57	5.29	24.51	344.2	0.104
51	14.08	33.33	5.66	50	14.85	33.34	5.65	24.75	322.5	0.170
82	12.22	33.28	5.45	75	12.59	33.27	5.55	25.15	284.1	0.246
173	9.15	33.73	3.42	100	11.24	33.32	5.07	25.45	256.7	0.314
161p	9.18r	33.73r	3.31r	150	9.68	33.60	3.97	25.93	211.1	0.431
274p	7.62	34.11	1.46	200	8.59	33.86	2.78	26.31	175.6	0.527
391p	6.82	34.18	0.68	250	7.86	34.04	1.82	26.56	152.6	0.609
675p	5.26	34.36	0.26	300	7.43	34.14	1.18	26.70	139.8	0.683
1023p	3.88	34.47	0.62	400	6.76	34.18	0.64	26.83	129.2	0.817
1303p	3.26	34.52	1.02	500	6.19	34.24	0.37	26.95	118.2	0.941
				600	5.65	34.31	0.27	27.07	107.5	1.054
				700	5.12	34.37	0.26	27.18	97.3	1.156
				800	4.67	34.41	0.35	27.27	90.1	1.250
				1000	3.93	34.46	0.60	27.39	79.4	1.420

1005 HORIZON; June 1, 1949; 1807 GCT; 29°53'N, 119°,29'W; sounding, missing; wind, 330°, force 3; weather, partly cloudy; sea, very rough; wire angle, 52°.

0	16.61	33.57	5.30	0	16.61	33.57	5.30	24.53	341.7	0.000
6	16.64	33.51	5.30	10	16.63	33.50	5.34	24.47	347.7	0.034
16	16.65	33.49	5.39	20	16.64	33.49	5.44	24.46	348.9	0.069
30	16.58	33.51	5.49	30	16.58	33.51	5.49	24.49	346.8	0.104
43	15.71	33.64	5.46	50	15.31	33.64	5.35	24.88	310.1	0.170
65	14.64	33.51	4.74	75	14.36	33.48	4.71	24.96	302.8	0.246
133	10.84	33.40	4.66	100	12.67	33.44	4.70	25.27	273.3	0.318
211	9.08	33.86	3.39	150	10.25	33.43	4.46	25.70	232.9	0.445
272	8.13	34.00	3.04	200	9.23	33.78	3.60	26.15	191.6	0.551
338	7.48	34.05	1.95	250	8.42	33.96	3.25	26.42	166.7	0.641
548	5.68	34.18	0.65	300	7.86	34.03	2.57	26.55	154.2	0.720
871	4.32	34.42	0.44	400	6.83	34.07	1.50	26.73	138.1	0.867
1141	3.50	34.49	1.15	500	5.97	34.14	0.90	26.90	123.0	0.997
				600	5.43	34.22	0.53	27.03	111.4	1.115
				700	5.00	34.31	0.46	27.15	100.3	1.221
				800	4.59	34.38	0.45	27.25	91.2	1.316
				1000	3.90	34.47	0.68	27.40	78.4	1.486

1006 HORIZON; June 1, 1949; 1110 GCT; 29°31'N, 120°07'W; sounding, missing; wind, 340°, force 3; weather, cloudy; sea, rough; wire angle, 50°.

0	16.91	33.71	5.51	0	16.91	33.71	5.51	24.57	338.3	0.000
8	17.17	33.68	5.62	10	17.20	33.67	5.65	24.47	348.0	0.034
14	17.18	33.66	5.70	20	17.00	33.66	5.88	24.51	344.7	0.069
23	16.82	33.75	5.93	30	16.33	33.78	5.78	24.75	321.3	0.102
29	16.41	33.78	5.79	50	14.61	33.64	5.43	25.03	295.4	0.164
4p	17.18r	33.69r	5.48r	75	13.42	33.55	5.27	25.21	279.0	0.236
97	11.96	33.51	5.12	100	11.88	33.51	5.10	25.48	254.0	0.302
181	10.20	-	-	150	10.72	33.62	4.80	25.77	226.7	0.423
253	8.39	33.96	4.12	200	9.80	33.79	4.50	26.06	200.0	0.529
330	7.25	34.07	2.53	250	8.45	33.95	4.15	26.40	167.9	0.621
579	5.48	34.25	0.92	300	7.58	34.04	3.22	26.60	149.2	0.701
936	4.21	34.42	0.53	400	6.57	34.11	1.85	26.80	131.8	0.840
1234	3.38	34.51	1.50	500	5.91	34.19	1.25	26.95	118.4	0.966
				600	5.38	34.27	0.87	27.07	107.2	1.078
				700	5.00	34.32	0.65	27.16	99.5	1.182
				800	4.63	34.37	0.55	27.24	92.2	1.277
				1000	4.01	34.44	0.63	27.36	81.8	1.452

HORIZON; June 1, 1949; 0405 GCT; 29°07'N, 120°50'W; sounding, missing; wind, 330°, force 3; weather, partly cloudy; sea, rough; wire angle, 40°. 1007

OBSERVED Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	INTERPOLATED Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	COMPUTED σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m
0	17.20	33.78	5.55		0	17.20	33.78	5.55		24.55	340.1	0.000
8	17.72	33.77	5.61		10	17.68	33.77	5.63		24.43	351.8	0.035
18	17.71	33.86	5.68		20	17.68	33.86	5.68		24.50	345.4	0.069
34	16.76	33.75	5.94		30	17.06	33.80	5.80		24.60	335.9	0.103
46	15.07	33.66	6.05		50	14.93	33.63	6.01		24.95	303.1	0.167
58	14.66	33.58	5.61		75	13.92	33.52	4.44		25.08	291.3	0.242
84	-	33.77r	4.08		100	13.30	33.49	3.74		25.18	282.0	0.313
114	13.04	33.49	3.44		150	11.63	33.55	2.93		25.55	247.8	0.446
189	-	33.75	2.38		200	9.83	33.83	2.23		26.09	197.5	0.557
274	8.74	34.11	0.88		250	9.06	34.05	1.18		26.39	169.7	0.649
443	7.11	34.29	0.68		300	8.47	34.15	0.76		26.56	154.4	0.730
707	5.42	34.40	0.42		400	7.48	34.26	0.69		26.79	133.1	0.873
1106	3.83	34.45	0.76		500	6.66	34.32	0.63		26.95	118.7	0.999
					600	6.01	34.37	0.49		27.08	107.8	1.113
					700	5.47	34.40	0.42		27.17	99.8	1.217
					800	5.00	34.42	0.40		27.24	93.3	1.313
					1000	4.20	34.44	0.59		27.34	84.0	1.490

HORIZON; May 31, 1949; 2222 GCT; 28°50'N, 121°20'W; sounding, missing; wind, 350°, force 3; weather, cloudy; sea, rough; wire angle, 22°. 1008

0	17.89	33.82	5.29		0	17.89	33.82	5.29		24.42	352.5	0.000
9	18.06	33.78	5.30		10	18.06	33.78	5.31		24.34	359.7	0.036
23	17.33	33.78	5.36		20	17.68	33.78	5.35		24.44	351.3	0.071
46	15.88	33.71	5.60		30	16.75	33.77	5.42		24.65	331.1	0.105
70	14.94	33.68	5.50		50	15.83	33.71	5.62		24.81	316.2	0.170
93	13.38	33.57	5.13		75	14.56	33.65	5.43		25.05	294.4	0.246
140	10.50	33.64	4.20		100	12.85	33.57	4.97		25.34	267.3	0.317
187	9.06	33.87	3.68		150	10.15	33.67	4.11		25.91	213.5	0.437
281	8.19	34.14	2.04		200	8.92	33.94	3.48		26.32	174.7	0.534
375	7.28	34.23	0.91		250	8.42	34.08	2.55		26.51	157.7	0.617
564	6.12	34.34	0.32		300	8.01	34.16	1.77		26.63	146.6	0.693
850	4.59	34.43	0.40		400	7.13	34.25	0.77		26.83	129.1	0.830
1142	3.67	34.43	0.57		500	6.50	34.31	0.43		26.97	117.2	0.953
					600	5.91	34.36	0.32		27.08	107.2	1.066
					700	5.35	34.40	0.32		27.18	97.8	1.168
					800	4.83	34.42	0.36		27.26	91.1	1.263
					1000	3.98	34.43	0.50		27.36	82.0	1.437

HORIZON; May 31, 1949; 1652 GCT; 28°31'N, 121°52'W; sounding, missing; wind, 020°, force 3; weather, overcast; sea, moderate; wire angle, 16°. 1009

0	17.64	33.82	5.41		0	17.64	33.82	5.41		24.48	346.8	0.000
9	18.04	33.82	5.42		10	18.06	33.82	5.42		24.37	356.7	0.035
23	17.50	33.78	5.75		20	17.87	33.79	5.66		24.40	354.7	0.071
48	15.94	33.75	5.95		30	17.16	33.77	5.85		24.55	340.3	0.106
71	14.30	33.60	5.74		50	15.78	33.74	5.94		24.85	312.7	0.171
96	12.84	33.49	5.05		75	14.06	33.54	5.68		25.07	292.6	0.246
144	10.60	33.69	3.38		100	12.61	33.49	4.85		25.32	268.8	0.317
192	9.56	34.04	2.53		150	10.66	33.74	3.25		25.88	216.8	0.438
286	7.78	34.06	2.13		200	9.39	34.05	2.50		26.33	174.0	0.536
379	6.51	34.09	1.13		250	8.39	34.06	2.31		26.50	158.8	0.619
567	5.86	34.38	0.48		300	7.57	34.06	2.00		26.62	147.7	0.696
853	4.45	34.45	0.44		400	6.38	34.11	0.96		26.82	129.2	0.833
1267	3.31	34.52	1.17		500	6.13	34.28	0.60		26.99	114.5	0.955
					600	5.67	34.39	0.43		27.14	101.6	1.064
					700	5.15	34.42	0.38		27.22	94.0	1.161
					800	4.65	34.44	0.39		27.29	87.5	1.253
					1000	3.85	34.47	0.65		27.40	77.7	1.418

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
1010	HORIZON; May 31, 1949; 1135 GCT; 28°11'N, 122°25'W; sounding, missing; wind, 340°, force 3; weather, clear; sea, rough; wire angle, 22°.											
0	18.05	33.77	5.12		0	18.05	33.77	5.12		24.34	360.1	0.000
9	18.12	33.77	5.45		10	18.13	33.77	5.47		24.31	362.7	0.036
23	17.26	33.82	5.60		20	17.53	33.82	5.58		24.50	344.8	0.071
46	16.50	33.75	5.68		30	17.20	33.81	5.66		24.58	338.4	0.106
69	14.52	33.57	5.75		50	16.11	33.75	5.73		24.78	319.3	0.171
93	12.56	33.48	4.88		75	13.97	33.52	5.73		25.07	292.2	0.248
139	10.22	33.84	2.84		100	12.12	33.49	4.20		25.41	259.8	0.317
186	9.40	34.07	2.61		150	9.98	33.96	2.78		26.16	189.6	0.430
280	8.15	34.16	1.72		200	9.17	34.09	2.52		26.40	167.6	0.519
374	7.40	34.23	0.78		250	8.45	34.14	2.07		26.55	153.9	0.599
562	5.40	34.25	0.52		300	7.99	34.18	1.50		26.66	144.9	0.674
844	4.35	34.42	0.41		400	7.05	34.23	0.68		26.83	129.4	0.811
1257	3.29	34.45	1.07		500	5.84	34.24	0.52		26.99	113.8	0.933
					600	5.24	34.27	0.51		27.09	105.2	1.042
					700	4.86	34.35	0.45		27.20	95.4	1.142
					800	4.50	34.41	0.41		27.29	87.7	1.234
					1000	3.85	34.43	0.52		27.37	80.8	1.402
1011	HORIZON; May 31, 1949; 0520 GCT; 27°51'N, 123°02'W; sounding, missing; wind, 360°, force 4; weather, squally; sea, rough; wire angle, 40°.											
0	18.35	33.80	4.69		0	18.35	33.80	4.69		24.29	364.7	0.000
8	18.50	33.77	5.18		10	18.50	33.77	5.18		24.23	370.9	0.037
19	17.27	33.82	5.23		20	17.26	33.82	5.24		24.57	338.7	0.072
39	16.82	33.73	5.43		30	17.00	33.80	5.35		24.61	334.7	0.106
60	16.02	33.71	5.52		50	16.45	33.72	5.50		24.68	328.7	0.172
79	14.54	33.62	5.43		75	14.78	33.64	5.48		24.99	299.7	0.251
118	11.97	33.48	4.14		100	13.17	33.50	4.79		25.21	279.3	0.323
157	10.74	33.80	2.85		150	11.00	33.77	3.06		25.84	220.4	0.449
235	8.70	34.07	2.44		200	9.40	33.96	2.64		26.26	180.8	0.549
313	8.09	34.31	1.89		250	8.56	34.12	2.34		26.52	156.9	0.633
470	6.76	34.31	0.46		300	8.16	34.28	2.00		26.71	140.0	0.707
704	4.72	34.34	0.33		400	7.38	34.31	0.92		26.84	128.2	0.841
1075	3.71	34.49	1.00		500	6.49	34.31	0.44		26.97	117.2	0.963
					600	5.54	34.32	0.37		27.10	105.5	1.075
					700	4.75	34.34	0.33		27.20	94.9	1.175
					800	4.19	34.39	0.44		27.31	85.4	1.265
					1000	3.78	34.47	0.82		27.41	76.8	1.428
1101	HORIZON; June 3, 1949; 0459 GCT; 29°30'N, 116°05'W; sounding, missing; wind, 335°, force 2; weather, overcast; sea, rough; wire angle, 31°.											
0	16.8	33.64	4.65		0	16.8	33.64	4.65		24.54	341.0	0.000
8	16.79	33.64	5.00		10	16.79	33.64	4.95		24.54	341.3	0.034
21	-	33.62	4.34		20	16.79	33.62	4.45		24.52	342.9	0.068
42	15.28	33.55	3.19		30	16.79	33.60	3.95		24.51	344.8	0.103
63	12.84	33.40	2.74		50	14.34	33.49	3.04		24.97	301.1	0.167
83	11.78	33.46	2.34		75	12.18	33.41	2.48		25.34	266.2	0.238
124	10.00	33.80	2.15		100	10.92	33.64	2.23		25.75	227.6	0.300
164	9.42	33.96	0.94		150	9.59	33.92	1.22		26.20	186.0	0.404
244	8.73	34.25	0.73		200	9.07	34.11	0.81		26.43	164.5	0.491
325	7.65	34.18	0.49		250	8.68	34.25	0.68		26.60	149.2	0.569
493	6.45	34.27	0.37		300	8.03	34.19	0.57		26.65	144.8	0.643
758	4.86	34.40	0.60		400	7.08	34.19	0.39		26.79	132.8	0.782
1040	4.05	34.43	0.80		500	6.40	34.27	0.37		26.95	118.9	0.908
					600	5.77	34.35	0.43		27.09	106.0	1.020
					700	5.17	34.39	0.55		27.20	96.4	1.121
					800	4.70	34.41	0.65		27.27	90.2	1.215
					1000	4.13	34.43	0.79		27.34	83.8	1.389

1102

HORIZON; June 3, 1949; 1054 GCT; 29°09'N, 116°44'W; sounding, missing; wind, 320°, force 1; weather, overcast; sea, rough; wire angle, 11°.

OBSERVED Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	INTERPOLATED Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	COMPUTED σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m
0	16.27	33.68	5.90		0	16.27	33.68	5.90		24.69	326.4	0.000
10	16.56	33.66	5.31		10	16.56	33.66	5.31		24.61	334.4	0.033
24	16.42	33.66	5.86		20	16.55	33.66	5.82		24.61	334.5	0.067
48	10.78	33.60	3.60		30	13.93	33.66	5.64		25.19	280.0	0.097
73	9.74	33.85	2.80		50	10.65	33.60	3.48		25.77	224.9	0.148
97	9.68	34.02	2.16		75	9.70	33.92	2.73		26.18	186.2	0.199
146	8.72	34.05	2.00		100	9.66	34.02	2.13		26.27	178.4	0.245
292	7.38	34.16	1.01		150	8.67	34.05	1.97		26.45	162.0	0.330
389	6.88	34.29	0.57		200	8.07	34.09	1.69		26.57	151.0	0.408
583	5.47	34.33	0.33		250	7.66	34.13	1.31		26.66	143.0	0.481
875	4.24	34.43	0.60		300	7.34	34.17	0.96		26.74	136.3	0.552
1296	3.18	34.52	0.98		400	6.78	34.30	0.54		26.92	120.4	0.679
					500	6.02	34.31	0.38		27.03	111.1	0.796
					600	5.36	34.33	0.33		27.12	102.2	0.902
					700	4.91	34.37	0.38		27.21	94.7	1.001
					800	4.51	34.41	0.51		27.29	87.7	1.092
					1000	3.85	34.47	0.76		27.40	77.6	1.257

HORIZON; June 3, 1949; 1625 GCT; 28°46'N, 117°25'W; sounding, missing; wind, 270°, force 2; weather, cloudy; sea, rough; wire angle, 20°. 1103

OBSERVED Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	INTERPOLATED Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	COMPUTED σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m
0	16.4	33.60	4.90		0	16.4	33.60	4.90		24.61	334.4	0.000
9	16.38	33.58	5.38		10	16.37	33.58	5.42		24.59	336.3	0.034
23	16.39	33.58	5.73		20	16.37	33.58	5.67		24.59	336.4	0.067
46	14.33	33.40	5.90		30	16.37	33.55	5.84		24.57	338.2	0.101
70	12.92	33.26	5.66		50	14.08	33.36	5.88		24.92	305.4	0.165
93	11.48	33.42	4.91		75	12.50	33.27	5.58		25.17	282.5	0.239
140	10.14	33.62	3.77		100	11.32	33.48	4.72		25.56	246.2	0.305
186	9.42	34.11	2.05		150	9.97	33.76	3.40		26.01	204.0	0.418
277	8.31	34.22	2.00r		200	9.18	34.13	1.77		26.43	164.9	0.510
366	8.14	34.36	0.54		250	8.55	34.18	1.13		26.57	152.3	0.588
545	6.20	34.36	0.34		300	8.27	34.27	0.81		26.68	142.6	0.663
822	4.62	34.42	0.74		400	7.76	34.36	0.47		26.82	129.8	0.799
1114	3.70	34.51	0.90		500	6.64	34.36	0.35		26.99	115.5	0.922
					600	5.77	34.37	0.37		27.10	104.6	1.032
					700	5.16	34.38	0.50		27.19	97.0	1.133
					800	4.70	34.41	0.69		27.27	90.2	1.226
					1000	3.94	34.48	0.86		27.41	77.8	1.395

HORIZON; June 3, 1949; 2143 GCT; 28°26'N, 117°58'W; sounding, missing; wind, 270°, force 1; weather, overcast; sea, rough; wire angle, 25°. 1104

OBSERVED Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	INTERPOLATED Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	COMPUTED σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m
0	17.36	33.66	5.07		0	17.36	33.66	5.07		24.42	352.0	0.000
9	17.33	33.66	4.90		10	17.33	33.66	4.89		24.43	351.7	0.035
22	17.09	33.66	4.78		20	17.15	33.66	4.79		24.47	348.1	0.070
45	15.28	33.66	5.07		30	16.42	33.66	4.80		24.64	332.1	0.104
67	14.31	33.55	5.01		50	15.06	33.65	5.08		24.94	304.2	0.168
90	13.26	33.53	4.99		75	13.93	33.54	5.03		25.09	290.1	0.242
133	11.21	33.66	3.32		100	12.90	33.53	4.69		25.29	271.4	0.312
174	9.56	33.82	2.90		150	10.40	33.73	3.12		25.91	213.3	0.434
256	7.90	34.02	2.01		200	8.82	33.90	2.67		26.31	176.2	0.531
339	6.96	34.09	1.64		250	7.99	34.01	2.10		26.52	156.5	0.614
513	6.36	34.33	0.74		300	7.31	34.07	1.81		26.67	143.3	0.689
781	4.79	34.36	0.38		400	6.72	34.14	1.27		26.80	131.6	0.826
1063	3.82	34.45	0.82		500	6.43	34.31	0.78		26.97	116.4	0.950
					600	5.87	34.35	0.55		27.08	107.3	1.063
					700	5.22	34.36	0.40		27.16	99.3	1.165
					800	4.70	34.37	0.38		27.23	93.1	1.261
					1000	3.98	34.43	0.65		27.36	81.9	1.437

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

1105 HORIZON; June 4, 1949; 0329 GCT; 28°04'N, 118°36'W; sounding, missing; wind, 315°, force 2; weather, overcast; sea, high; wire angle, 12°.

0	17.1	33.62	5.19	0	17.1	33.62	5.19	24.46	348.2	0.000
10	17.04	33.60	4.74	10	17.04	33.60	4.74	24.45	349.8	0.035
24	16.91	33.60	4.98	20	16.95	33.60	4.96	24.47	347.8	0.070
48	16.10	33.82	5.05	30	16.75	33.63	4.97	24.54	341.5	0.104
73	15.50	33.80	4.92	50	16.03	33.82	5.05	24.85	312.4	0.170
97	14.54	33.66	4.80	75	15.30	33.79	4.90	24.99	299.6	0.246
82	14.80	33.69	3.91r	100	14.52	33.65	4.79	25.05	294.5	0.320
161	9.68	33.64	3.59	150	10.74	33.63	3.85	25.78	226.3	0.450
243	7.90	34.00	2.31	200	8.56	33.86	2.98	26.32	175.1	0.551
415	6.60	34.23	0.46	250	7.82	34.01	2.17	26.54	154.2	0.633
676	5.26	34.42	0.15	300	7.37	34.10	1.44	26.68	141.9	0.708
944	4.21	34.45	0.41	400	6.70	34.22	0.53	26.87	125.3	0.840
				500	6.12	34.31	0.26	27.01	112.5	0.959
				600	5.62	34.39	0.17	27.14	101.2	1.066
				700	5.17	34.43	0.15	27.23	93.6	1.163
				800	4.76	34.44	0.24	27.28	88.9	1.256
				1000	(4.04)	(34.46)	-	(27.37)	(80.6)	(1.425)

1106 HORIZON; June 4, 1949; 0913 GCT; 27°43'N, 119°40'W; sounding, missing; wind, 315°, force 2; weather, cloudy; sea, very rough; wire angle, 11°.

0	17.8	33.78	4.86	0	17.8	33.78	4.86	24.39	354.8	0.000
10	17.82	33.80	5.20	10	17.82	33.80	5.20	24.41	353.2	0.035
25	17.82	33.80	5.35	20	17.82	33.80	5.31	24.42	353.1	0.071
49	17.09	33.77	5.50	30	17.75	33.80	5.38	24.43	351.8	0.100
73	15.06	33.65	5.36	50	17.02	33.77	5.50	24.59	337.4	0.175
97	13.22	33.49	4.94	75	14.98	33.63	5.33	24.94	304.6	0.255
146	10.68	33.67	3.22	100	13.00	33.49	4.83	25.24	276.3	0.328
195	9.44	33.91	2.76	150	10.47	33.68	3.17	25.86	218.2	0.451
293	8.50	34.25	1.09	200	9.36	33.93	2.72	26.24	182.3	0.552
391	7.70	34.29	0.58	250	8.86	34.16	1.62	26.50	158.7	0.637
586	6.07	34.36	0.26	300	8.44	34.26	1.02	26.65	145.8	0.713
880	4.49	34.43	0.42	400	7.62	34.30	0.56	26.80	132.3	0.852
1176	3.58	34.51	0.68	500	6.78	34.33	0.35	26.94	119.6	0.978
				600	5.97	34.36	0.26	27.07	108.0	1.091
				700	5.32	34.39	0.27	27.18	98.4	1.195
				800	4.81	34.41	0.34	27.25	91.7	1.290
				1000	4.08	34.46	0.53	27.37	80.7	1.462

1107 HORIZON; June 4, 1949; 1504 GCT; 27°15'N, 120°01'W; sounding, missing; wind, 290°, force 1; weather, overcast; sea, rough; wire angle, 21°.

0	17.8	33.91	4.90	0	17.8	33.91	4.90	24.51	344.0	0.000
8	17.80	33.80	4.99	10	17.80	33.80	5.02	24.42	352.4	0.035
22	17.81	33.78	5.32	20	17.80	33.78	5.31	24.41	354.0	0.070
46	16.36	33.69	5.11	30	17.81	33.75	5.30	24.38	356.7	0.106
69	15.29	33.69	5.29	50	16.07	33.69	5.12	24.74	322.6	0.174
92	14.46	33.55	5.40	75	15.04	33.64	5.35	24.93	305.3	0.252
137	11.62	33.49	4.49	100	14.22	33.53	5.36	25.02	297.2	0.327
182	9.66	33.73	3.70	150	11.02	33.49	4.25	25.62	241.4	0.462
268	8.16	34.05	2.40	200	9.10	33.83	3.41	26.21	185.5	0.569
353	7.38	34.23	1.22	250	8.34	34.00	2.67	26.46	162.6	0.656
531	6.16	34.31	0.73	300	7.83	34.12	1.97	26.63	147.0	0.733
802	4.82	34.51	0.24	400	7.04	34.28	1.00	26.87	125.5	0.869
1086	3.86	34.49	0.57	500	6.37	34.30	0.84	26.97	116.2	0.990
				600	5.73	34.37	0.48	27.11	104.2	1.100
				700	5.22	34.47	0.31	27.25	91.4	1.198
				800	4.83	34.50	0.24	27.32	85.4	1.286
				1000	4.14	34.50	0.42	27.40	78.8	1.451

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

HORIZON; June 4, 1949; 1941 GCT; 26°58'N, 120°30'W; sounding, missing; wind, calm; weather, overcast; sea, rough; wire angle, 10°. 1108

0	18.2	33.89	5.01	0	18.2	33.89	5.01	24.39	354.7	0.000
10	18.18	33.82	5.26	10	18.18	33.82	5.26	24.35	359.8	0.036
24	18.03	33.86	4.93	20	18.08	33.84	4.97	24.38	356.3	0.072
48	16.90	33.89	4.85	30	17.70	33.87	4.89	24.50	345.5	0.107
73	16.08	33.89	5.24	50	16.82	33.89	4.88	24.73	324.5	0.174
98	15.64	33.82	5.13	75	16.02	33.88	5.25	24.90	308.6	0.253
147	12.52	33.55	5.10	100	15.46	33.81	5.13	24.98	301.8	0.329
196	10.12	33.64	4.80	150	11.64	33.55	5.09	25.55	248.0	0.466
294	8.56	34.09	2.04	200	10.02	33.65	4.76	25.91	214.0	0.582
390	7.32	34.22	1.73	250	9.18	33.99	2.87	26.32	176.1	0.680
583	5.96	34.32	0.44	300	8.48	34.10	2.02	26.52	158.1	0.763
872	4.51	34.31	0.66	400	7.22	34.23	1.68	26.80	131.8	0.908
1162	3.61	34.43	0.77	500	6.46	34.30	0.88	26.96	117.4	1.033
				600	5.87	34.32	0.40	27.05	109.5	1.146
				700	5.31	34.31	0.50	27.11	104.2	1.253
				800	4.80	34.31	0.59	27.17	99.0	1.355
				1000	4.06	34.36	0.71	27.30	88.0	1.546

HORIZON; June 5, 1949; 0057 GCT; 26°37'N, 121°07'W; sounding, missing; wind, 300°, force 1; weather, cloudy; sea, rough; wire angle, 7°. 1109

0	18.2	33.89	4.84	0	18.2	33.89	4.84	24.40	353.7	0.000
10	18.12	33.90	5.05	10	18.12	33.90	5.05	24.42	352.6	0.035
25	18.01	33.91	5.08	20	18.05	33.91	5.05	24.44	350.7	0.070
50	17.14	33.96	5.04	30	17.90	33.92	5.04	24.49	346.5	0.105
75	16.00	33.87	5.10	50	17.14	33.96	5.04	24.70	326.8	0.173
99	15.21	33.75	5.26	75	16.00	33.87	5.10	24.90	308.9	0.252
148	13.74	33.57	4.96	100	15.20	33.75	5.26	24.99	301.0	0.328
198	10.44	33.62	3.94	150	13.69	33.57	4.92	25.17	284.9	0.475
297	8.48	34.13	2.08	200	10.30	33.67	3.90	25.88	216.8	0.601
396	7.34	34.27	1.08	250	9.10	34.00	2.88	26.34	174.0	0.698
594	5.88	34.34	0.46	300	8.44	34.14	2.06	26.55	154.7	0.780
892	4.42	34.47	0.56	400	7.30	34.27	1.03	26.82	129.9	0.922
1189	3.50	34.49	0.84	500	6.50	34.32	0.56	26.97	116.4	1.046
				600	5.86	34.34	0.46	27.07	107.8	1.158
				700	5.33	34.41	0.47	27.19	104.0	1.264
				800	4.83	34.45	0.50	27.28	89.0	1.360
				1000	3.99	34.49	0.64	27.40	77.8	1.527

HORIZON; June 5, 1949; 0612 GCT; 26°15'N, 121°45'W; sounding, missing; wind, 270°, force 1; weather, cloudy; sea, indeterminate; wire angle, 12°. 1110

0	18.43	33.94	5.01	0	18.43	33.94	5.01	24.37	357.1	0.000
10	18.46	33.93	5.14	10	18.46	33.93	5.14	24.36	358.7	0.036
25	18.43	34.00	5.35	20	18.46	33.99	5.28	24.41	354.3	0.071
49	17.10	33.95	5.37	30	18.37	33.99	5.37	24.43	352.2	0.107
73	16.30	33.87	5.48	50	17.00	33.94	5.39	24.72	324.9	0.174
97	15.98	33.84	5.36	75	16.28	33.86	5.47	24.83	315.6	0.255
146	13.78	33.60	4.98	100	15.90	33.83	5.35	24.89	310.1	0.333
195	10.30	33.60	3.55	150	13.40	33.59	4.90	25.24	277.9	0.479
292	8.72	34.16	1.64	200	10.20	33.68	3.37	25.91	214.4	0.603
390	7.30	34.20	1.58	250	9.37	34.10	2.00	26.37	171.1	0.700
586	5.74	34.34	1.24	300	8.60	34.16	1.64	26.54	155.6	0.781
878	4.50	34.45	0.68	400	7.18	34.21	1.57	26.79	132.6	0.925
1174	3.64	34.52	0.86	500	6.34	34.29	1.42	26.97	116.6	1.050
				600	5.66	34.35	1.20	27.10	104.7	1.160
				700	5.17	34.39	0.94	27.20	96.4	1.261
				800	4.77	34.43	0.74	27.27	89.7	1.354
				1000	4.11	34.48	0.68	27.38	80.1	1.524

SIO

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4906

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

1111 HORIZON; June 5, 1949; 1140 GCT; 25°52'N, 122°23'W; sounding, missing; wind, 270°, force 1; weather, clear; sea, indeterminate; wire angle, 16°.

0	18.9	34.02	5.23	0	18.9	34.02	5.23	24.32	361.5	0.000
10	18.87	34.04	5.12	10	18.87	34.04	5.12	24.34	360.2	0.036
24	18.84	34.02	4.96	20	18.87	34.03	5.00	24.33	361.1	0.072
48	17.42	33.96	5.40	30	18.33	34.00	4.96	24.45	350.7	0.108
72	17.08	34.03	5.89	50	17.39	33.96	5.64	24.64	332.4	0.176
96	16.70	34.02	5.44	75	17.05	34.03	5.89	24.78	320.4	0.258
144	13.61	33.68	5.19	100	16.61	34.00	5.41	24.86	313.1	0.337
191	10.42	33.73	3.52	150	13.00	33.67	5.05	25.38	264.3	0.481
285	8.43	34.04	2.34	200	10.15	33.76	3.30	25.98	207.7	0.600
379	7.13	34.11	2.18	250	9.04	33.97	2.52	26.33	175.5	0.695
570	5.78	34.29	0.50	300	8.18	34.06	2.33	26.53	156.6	0.778
862	4.58	34.40	0.56	400	6.94	34.13	2.00	26.76	135.4	0.924
1161	3.68	34.39	0.50	500	6.18	34.23	0.77	26.94	118.9	1.051
				600	5.62	34.31	0.50	27.08	107.1	1.164
				700	5.17	34.36	0.53	27.17	98.8	1.267
				800	4.79	34.39	0.55	27.24	92.9	1.363
				1000	4.12	34.40	0.52	27.32	86.0	1.542

1201 HORIZON; June 8, 1949; 0635 GCT; 27°30'N, 115°18'W; sounding, missing; wind, 315°, force 4; weather, overcast; sea, rough; wire angle, 54°.

0	15.41	33.64	5.13r	0	15.41	33.64	24.85	310.9	0.000
6	15.55	33.62	5.20r	10	15.55	33.62	24.81	315.5	0.031
16	15.54	33.66	5.04r	20	15.52	33.65	24.84	312.8	0.063
27	14.80	33.51	-	30	13.50	33.51	25.16	282.6	0.092
35	12.40	33.62	5.33r	50	11.43	33.69	25.70	231.7	0.144
40	12.09	33.66	5.10r	75	10.47	33.74	25.91	212.2	0.200
83	10.28	33.78	-	100	9.98	33.97	26.17	187.5	0.249
102	9.95	33.98	-	150	9.85	34.19	26.36	170.4	0.339
148	9.86	34.18	-	200	9.82	34.44	26.57	152.3	0.420
217	9.83	34.47	-	250	9.73	34.50	26.63	147.5	0.495
479	7.45	34.43	-	300	9.41	34.51	26.69	142.6	0.567
				400	8.25	34.47	26.84	129.3	0.703

1202 HORIZON; June 8, 1949; 0024 GCT; 27°05'N, 115°53'W; sounding, missing; wind, 330°, force 3; weather, overcast; sea, moderate; wire angle, 38°.

0	17.2	33.60	5.12	0	17.2	33.60	5.12	24.40	354.0	0.000
8	17.24	33.64	4.92	10	17.23	33.64	4.92	24.44	351.0	0.035
19	16.78	33.64	5.48	20	16.10	33.63	5.48	24.69	327.0	0.069
40	14.38	33.53	5.05	30	14.95	33.57	5.36	24.90	307.2	0.101
59	13.42	33.49	5.30	50	13.82	33.50	5.08	25.09	290.0	0.161
77	12.08	33.46	4.65	75	12.50	33.46	4.85	25.32	268.4	0.230
112	10.55	33.78	2.88	100	10.52	33.52	3.50	25.73	229.7	0.293
143	10.70	34.23	1.38	150	10.72	34.26	1.31	26.27	180.0	0.395
213	10.50	34.42	1.00	200	10.58	34.40	1.07	26.40	168.0	0.482
280	9.90	34.49	0.50	250	10.23	34.47	0.69	26.52	158.0	0.564
420	8.43	34.45	1.21	300	9.70	34.49	0.56	26.62	148.8	0.640
638	6.11	34.38	0.88	400	8.63	34.46	1.14	26.77	135.9	0.783
1001	4.10	34.45	0.59	500	7.53	34.46	1.21	26.94	120.7	0.911
				600	6.43	34.48	0.98	27.11	105.3	1.024
				700	5.69	34.48	0.75	27.20	96.7	1.125
				800	5.11	34.48	0.65	27.27	90.4	1.219
				1000	4.11	34.45	0.59	27.36	82.2	1.391

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	1203
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	
HORIZON; June 7, 1949; 1842 GCT; 26°40'N, 116°28'W; sounding, missing; wind, 330°, force 3; weather, partly cloudy; sea, moderate; wire angle, 23°.													
0	18.34	33.93	5.14		0	18.34	33.93	5.14		24.39	354.8	0.000	
9	18.41r	33.93	5.25		10	18.34	33.93	5.25		24.39	355.1	0.036	
23	18.34	33.91	5.17		20	18.34	33.92	5.19		24.38	356.3	0.071	
47	17.72	33.80	5.11		30	18.32	33.87	5.14		24.35	359.9	0.107	
68	15.48	33.69	5.51		50	17.50	33.78	5.12		24.48	348.1	0.178	
90	14.38	33.56	5.64		75	15.05	33.63	5.59		24.92	306.2	0.260	
135	11.23	33.49	4.24		100	13.80	33.54	5.50		25.12	288.0	0.334	
179	10.60	34.05	1.82		150	11.00	33.50	3.14		25.63	240.4	0.465	
266	9.59	34.33	1.65r		200	10.32	34.24	1.58		26.32	175.2	0.570	
355	7.86	34.25	0.88		250	9.77	34.32	1.24		26.48	161.5	0.654	
538	6.50	34.34	0.40		300	8.87	34.30	1.03		26.61	149.5	0.731	
813	4.80	34.43	0.50		400	7.48	34.26	0.73		26.79	133.1	0.873	
1089	3.82	34.47	0.74		500	6.78	34.32	0.48		26.94	120.3	0.999	
					600	5.99	34.37	0.36		27.08	107.4	1.113	
					700	5.35	34.40	0.37		27.18	98.1	1.216	
					800	4.85	34.43	0.46		27.26	90.7	1.310	
					1000	4.10	34.46	0.68		27.37	81.3	1.482	
HORIZON; June 7, 1949; 1310 GCT; 26°16'N, 117°03'W; sounding, missing; wind, 320°, force 2; weather, partly cloudy; sea, slight; wire angle, 18°.													1204
0	18.9	34.05	4.79		0	18.9	34.05	4.79		24.34	359.7	0.000	
10	18.87	33.99	4.98		10	18.87	33.99	4.98		24.30	363.6	0.036	
24	18.81	34.04	5.00		20	18.83	33.99	5.00		24.31	363.0	0.072	
47	18.74	34.07	5.10		30	18.79	34.07	5.01		24.39	356.6	0.108	
71	16.04	33.80	5.45		50	17.60	34.05	5.13		24.66	330.6	0.177	
95	14.98	33.71	5.25		75	15.91	33.78	5.47		24.85	313.4	0.258	
141	11.82	33.57	3.65		100	14.63	33.69	5.06		25.06	293.6	0.334	
187	9.80	33.93	2.80		150	11.43	33.57	3.44		25.61	242.7	0.467	
282	8.93	34.20	1.59		200	9.60	34.01	2.66		26.27	180.4	0.574	
376	8.05	34.31	0.68		250	9.17	34.15	2.04		26.45	164.3	0.660	
563	6.32	34.28	0.46		300	8.77	34.23	1.43		26.57	153.1	0.737	
842	4.83	34.42	0.85		400	7.80	34.31	0.62		26.78	134.1	0.880	
1136	3.79	34.45	1.49		500	6.87	34.29	0.46		26.90	123.9	1.009	
					600	6.06	34.28	0.49		27.00	114.9	1.129	
					700	5.47	34.33	0.60		27.11	105.0	1.239	
					800	4.98	34.39	0.77		27.22	95.3	1.339	
					1000	4.23	34.44	1.19		27.34	84.4	1.519	
HORIZON; June 7, 1949; 0741 GCT; 25°51'N, 117°37'W; sounding, missing; wind, 330°, force 2; weather, partly cloudy; sea, indeterminate; wire angle, 11°.													1205
0	19.41	34.07	4.68		0	19.41	34.07	4.68		24.23	370.7	0.000	
10	19.36	34.07	4.86		10	19.36	34.07	4.86		24.24	369.6	0.037	
24	19.20	34.09	5.08		20	19.24	34.09	5.01		24.28	365.9	0.074	
49	18.52	34.09	5.29		30	19.10	34.10	5.19		24.33	362.0	0.110	
73	16.48	33.86	5.15		50	18.27	34.09	5.30		24.53	343.4	0.181	
97	14.40	33.68	4.79		75	16.25	33.85	5.12		24.83	315.6	0.263	
147	11.13	33.78	2.74		100	14.05	33.68	4.74		25.18	282.7	0.338	
196	9.88	34.07	2.09		150	11.03	33.79	2.70		25.85	219.4	0.463	
294	9.35	34.40	0.59		200	9.86	34.09	2.01		26.29	178.6	0.563	
393	8.10	34.40	0.34		250	9.63	34.34	1.00		26.52	157.6	0.647	
590	6.51	34.43	0.31		300	9.23	34.40	0.57		26.63	147.6	0.723	
887	4.68	34.42	0.61		400	8.03	34.40	0.34		26.82	130.9	0.862	
1185	3.75	34.49	0.76		500	7.21	34.42	0.32		26.95	119.1	0.987	
					600	6.44	34.43	0.33		27.07	109.2	1.102	
					700	5.67	34.43	0.42		27.16	100.1	1.206	
					800	5.08	34.43	0.51		27.24	93.6	1.303	
					1000	4.23	34.46	0.69		27.35	82.9	1.479	

S10

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4906

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

1206 HORIZON; June 7, 1949; 0240 GCT; 25°28'N, 118°16'W; sounding, missing; wind, 290°, force 2; weather, partly cloudy; sea, indeterminate; wire angle, 20°.

0	19.7	34.22	4.51	0	19.7	34.22	4.51	24.26	367.5	0.000
9	19.71	34.20	4.51	10	19.70	34.20	4.51	24.25	368.8	0.037
23	19.36	34.14	4.73	20	19.42	34.15	4.60	24.28	365.8	0.073
46	18.62	34.05	5.14	30	19.17	34.12	4.86	24.32	362.3	0.110
69	16.98	33.95	5.18	50	18.45	34.02	5.16	24.43	352.6	0.181
92	15.50	33.75	5.22	75	16.60	33.84	5.19	24.74	323.9	0.266
138	11.66	33.59	3.60	100	14.08	33.71	5.16	25.27	273.7	0.341
183	10.91	33.91	2.43	150	11.42	33.58	3.13	25.61	241.8	0.469
275	9.37	34.23	1.54	200	10.66	34.06	2.26	26.12	194.2	0.579
371	8.15	34.33	0.68	250	9.85	34.19	1.84	26.36	172.3	0.670
564	6.53	34.38	0.21	300	9.02	34.27	1.17	26.56	153.9	0.752
855	4.68	34.43	0.66	400	7.85	34.35	0.41	26.81	131.8	0.895
1149	3.78	34.43	0.56	500	7.01	34.38	0.21	26.95	119.2	1.020
				600	6.26	34.39	0.26	27.06	109.5	1.135
				700	5.54	34.40	0.48	27.16	100.6	1.240
				800	4.94	34.42	0.62	27.24	92.5	1.336
				1000	4.20	34.43	0.65	27.33	84.7	1.513

1207 HORIZON; June 6, 1949; 2023 GCT; 25°00'N, 118°48'W; sounding, missing; wind, 330°, force 2; weather, partly cloudy; sea, moderate; wire angle, 15°.

0	19.28	34.13	4.05	0	19.28	34.13	4.05	24.30	363.7	0.000
10	19.29	34.14	4.85	10	19.29	34.14	4.85	24.31	363.4	0.036
24	19.13	34.09	4.85	20	19.22	34.11	4.85	24.30	363.8	0.073
48	17.04	33.89	5.13	30	18.20	34.00	4.89	24.48	347.7	0.108
72	15.77	33.82	5.15	50	16.89	33.88	5.14	24.70	326.7	0.176
96	14.16	33.68	4.70	75	15.50	33.81	5.14	24.97	302.1	0.254
145	10.78	33.71	2.71	100	13.84	33.67	4.65	25.21	279.2	0.327
193	10.30	34.23	1.64	150	10.67	33.80	2.58	25.92	212.8	0.450
289	9.18	34.38	0.90	200	10.26	34.25	1.57	26.34	173.4	0.547
387	8.42	34.43	0.53	250	9.75	34.34	1.10	26.50	159.6	0.629
579	6.13	34.40	0.08	300	9.09	34.39	0.87	26.65	146.0	0.706
868	4.53	34.47	0.49	400	8.31	34.43	0.49	26.80	133.2	0.845
1163	3.66	34.49	0.71	500	7.00	34.40	0.15	26.97	117.5	0.971
				600	5.95	34.41	0.08	27.12	104.0	1.081
				700	5.32	34.43	0.15	27.21	95.4	1.181
				800	4.82	34.46	0.34	27.29	88.2	1.273
				1000	4.06	34.49	0.58	27.40	78.5	1.440

1208 HORIZON; June 6, 1949; 1415 GCT; 24°35'N, 119°24'W; sounding, missing; wind, 300°, force 1; weather, cloudy; sea, moderate; wire angle, 19°.

0	19.3	34.07	4.35	0	19.3	34.07	4.35	24.25	368.8	0.000
10	19.31	34.07	4.98	10	19.31	34.07	4.98	24.25	368.7	0.037
23	19.16	34.05	5.19	20	19.20	34.06	5.16	24.27	367.0	0.074
47	17.90	33.95	5.21	30	18.84	34.03	5.20	24.34	360.9	0.110
70	16.38	33.82	5.35	50	17.68	33.93	5.23	24.55	341.1	0.180
94	15.32	33.75	5.35	75	16.17	33.80	5.36	24.81	317.5	0.263
140	11.62	33.68	4.08	100	14.98	33.73	5.30	25.02	297.8	0.340
185	10.12	34.05	2.35	150	11.10	33.69	3.65	25.76	228.2	0.471
275	9.34	34.31	1.36	200	9.88	34.13	2.18	26.31	176.1	0.572
364	8.57	34.42	0.48	250	9.43	34.27	1.70	26.50	159.5	0.656
542	6.60	34.42	0.35	300	9.16	34.35	0.89	26.61	150.1	0.733
815	4.86	34.42	0.33	400	8.14	34.43	0.45	26.82	130.7	0.873
1106	3.80	34.45	0.51	500	7.03	34.42	0.38	26.98	116.5	0.997
				600	6.08	34.42	0.33	27.11	104.9	1.108
				700	5.37	34.42	0.33	27.19	96.8	1.209
				800	4.90	34.42	0.33	27.25	92.0	1.303
				1000	4.43	34.45	0.43	27.33	86.2	1.481

OBSERVED					INTERPOLATED					COMPUTED			
Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m	
HORIZON; June 6, 1949; 0825 GCT; 24°11'N, 119°54'W; sounding, missing; wind, 315°, force 1; weather, cloudy; sea, rough; wire angle, 16°.													1209
0	19.1	33.91	5.09		0	19.1	33.91	5.09		24.17	376.0	0.000	
10	18.93	33.96	5.10		10	18.93	33.96	5.10		24.26	367.4	0.037	
24	18.60	33.95	5.20		20	18.68	33.96	5.16		24.33	361.6	0.074	
48	17.16	33.86	5.32		30	18.35	33.94	5.23		24.40	355.5	0.110	
71	15.82	33.75	5.30		50	16.95	33.84	5.34		24.66	331.1	0.178	
95	15.23	33.66	5.44		75	15.70	33.73	5.30		24.86	312.4	0.259	
144	13.33	33.55	4.52		100	15.08	33.65	5.44		24.93	306.0	0.336	
191	10.26	33.86	2.78		150	13.01	33.55	4.30		25.29	273.3	0.480	
284	9.94	34.34	0.72		200	10.15	34.04	2.45		26.20	187.1	0.596	
377	8.63	34.43	0.30		250	10.09	34.27	1.05		26.39	170.4	0.685	
566	6.44	34.36	0.28		300	9.70	34.37	0.62		26.53	157.6	0.767	
854	4.72	34.42	0.61		400	8.35	34.43	0.28		26.79	133.6	0.913	
1149	3.73	34.40r	0.67		500	7.19	34.39	0.28		26.93	120.9	1.040	
					600	6.13	34.35	0.30		27.05	110.8	1.156	
					700	5.43	34.37	0.44		27.15	101.4	1.262	
					800	4.93	34.40	0.57		27.23	93.9	1.360	
					1000	4.19	34.46	0.65		27.36	82.3	1.536	
HORIZON; June 6, 1949; 0240 GCT; 23°47'N, 120°30'W; sounding, missing; wind, 270°, force 1; weather, cloudy; sea, moderate; wire angle, 5°.													1210
0	19.58	33.98	4.54		0	19.58	33.98	4.54		24.11	381.5	0.000	
10	19.35	34.04	4.86		10	19.35	34.04	4.86		24.22	371.7	0.038	
25	19.25	34.04	4.96		20	19.29	34.04	4.95		24.23	370.6	0.075	
50	18.27	33.98	4.90		30	19.15	34.04	4.95		24.27	367.6	0.112	
75	16.75	33.91	5.32		50	18.27	33.98	4.90		24.45	351.3	0.184	
79	16.68	33.82	5.01		75	16.75	33.91	5.32		24.76	322.2	0.268	
104	15.08	33.75	5.11		100	15.35	33.75	5.09		24.95	304.3	0.346	
240	10.20	34.20	2.08		150	12.93	33.83	4.61		25.52	251.0	0.485	
319	8.85	34.40	0.68		200	11.10	34.03	3.18		26.02	204.3	0.599	
486	6.88	34.42	0.33		250	10.00	34.24	1.75		26.38	170.8	0.693	
741	5.22	34.42	0.38		300	9.15	34.37	0.81		26.62	148.5	0.772	
1019	4.10	34.51	0.59		400	7.75	34.41	0.44		26.87	126.0	0.909	
					500	6.75	34.42	0.33		27.01	112.6	1.029	
					600	5.94	34.42	0.33		27.12	103.3	1.137	
					700	5.40	34.42	0.35		27.19	97.3	1.237	
					800	4.95	34.43	0.43		27.25	91.9	1.332	
					1000	4.18	34.50	0.58		27.39	79.4	1.503	
BLACK DOUGLAS; July 16, 1949; 1056 GCT; 46°15'N, 125°05'W; sounding, 850 fm; wind, 270°, force 2; weather, partly cloudy; wire angle, 18°.													101
0	14.36	32.03E	-	-	0	14.36	32.03	(6.35)	(0.67)	23.84	406.9	0.000	
9	14.13	32.00	6.35	-	10	14.05	32.00	6.35	(0.67)	23.88	403.4	0.040	
23	12.69	32.41	6.57	0.67	20	13.12	32.33	6.50	(0.67)	24.33	361.4	0.079	
47	8.39	32.54	6.72	-	30	11.07	32.45	6.64	0.78	24.80	316.1	0.113	
71	6.74	32.70	6.09	1.43	50	8.10	32.55	6.73	1.09	25.35	263.2	0.171	
94	7.88	33.28	4.43	1.78	75	6.77	32.75	5.87	1.50	25.70	231.1	0.232	
142	7.72	33.77	2.68	2.43r	100	7.92	33.42	3.98	1.85	26.07	197.0	0.286	
190	7.27	33.93	2.20	2.50	150	7.85	33.82	2.60	2.28	26.39	167.1	0.377	
285	7.36	34.04	1.52	2.84	200	7.27	33.95	2.12	2.54	26.58	150.1	0.456	
380	6.73	34.07	1.07	3.06	250	7.35	34.01	1.74	2.73	26.61	147.4	0.531	
570	4.86	34.16	0.78	3.25	300	7.32	34.05	1.43	2.89	26.65	144.8	0.603	
1141u	3.70	34.40	0.36	3.44	400	6.47	34.08	1.02	3.09	26.79	132.6	0.742	
					500	5.39	34.12	0.84	3.20	26.95	116.9	0.867	
					600	4.73	34.18	0.77	3.26	27.08	105.7	0.978	
					700	4.32	34.24	0.69	3.31	27.17	97.4	1.080	
					800	4.04	34.31	0.62	3.35	27.26	89.8	1.173	
					1000	3.77	34.39	0.47	3.41	27.35	82.4	1.345	

E Evaporation of all salinity samples occurred on Cruise 4907 on stations 101 through 410. Estimated average corrections to values given here can be made by subtracting 0.022 ‰ from the value of S, 0.015 from σ_t and by adding 1.7 to $10^5\delta$ at all depths; to ΔD add 0.002 for each 100 meter depth increment.

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4907

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

102 BLACK DOUGLAS; July 16, 1949; 0505 GCT; 46°15'N, 125°47'W; sounding, 1400 fm; wind, 280°, force 4; weather, cloudy; sea, very rough; wire angle, 25°.

0	15.63	31.98E	6.15	0	15.63	31.98	6.15	23.55	436.5	0.000
9	15.30	31.92	5.98	10	15.20	31.93	5.99	23.58	431.5	0.043
22	14.47	32.30	-	20	14.65	32.20	6.22	23.91	400.7	0.085
45	11.49	32.54	6.23	30	13.85	32.45	6.27	24.27	366.9	0.123
67	8.58	32.63	6.40	50	10.63	32.57	6.34	24.97	300.4	0.190
89	6.90	32.66	6.46	75	7.41	32.64	6.43	25.52	247.3	0.259
132	7.99	33.55	3.89	100	7.00	32.70	6.43	25.63	238.1	0.319
174	7.69	33.89	2.25	150	7.89	33.77	2.89	26.35	171.3	0.422
253	7.07	33.96	2.05	200	7.49	33.92	2.12	26.52	155.3	0.503
326	6.23	34.02	1.73	250	7.10	33.96	2.06	26.61	147.8	0.578
465	5.31	34.07	1.12	300	6.50	34.00	1.87	26.72	137.6	0.650
983u	3.46	34.36	0.32	400	5.70	34.05	1.37	26.86	125.0	0.781
				500	5.12	34.08	1.04	26.95	116.9	0.902
				600	4.64	34.14	0.83	27.06	107.5	1.015
				700	4.27	34.20	0.66	27.14	99.7	1.118
				800	3.97	34.26	0.52	27.22	92.8	1.214
				1000	(3.40)	(34.37)	(0.32)	(27.37)	(79.7)	1.387

103 BLACK DOUGLAS; July 15, 1949; 2207, 1936 GCT; 46°15'N, 126°44'W; sounding, 1540 fm; wind, 020°, force 3; weather, cloudy; sea, rough; wire angle, 10°, 21°.

0	15.9	32.16E	-	0.51	0	15.9	32.16	-	0.51	23.61	428.9	0.000
10	15.79	32.03	-	0.51	10	15.79	32.03	-	0.51	23.53	436.6	0.043
24	14.64	32.20	-	-	20	15.25	32.06	-	0.52	23.68	423.2	0.086
49	10.16	32.41	-	0.96	30	13.75	32.27	-	0.61	24.16	378.1	0.126
73	7.82	32.70	-	1.55	50	9.90	32.43	-	0.97	24.99	299.0	0.194
98	7.81	33.40	-	2.07	75	7.81	32.71	-	1.59	25.53	247.6	0.262
147	7.72	33.73	-	2.44	100	7.80	33.47	-	2.10	26.12	191.6	0.317
196	7.40	33.80	-	2.56	150	7.72	33.73	-	2.45	26.34	171.9	0.408
295	7.41	33.89	-	2.85	200	7.40	33.80	-	2.58	26.44	163.2	0.492
393	6.61	34.02	-	3.01	250	7.40	33.85	-	2.72	26.48	160.2	0.572
590	5.17	34.09	-	3.33	300	7.38	33.90	-	2.86	26.52	156.8	0.652
987u	3.13r	34.31r	-	3.46	400	6.56	34.02	-	3.04	26.73	138.3	0.800
					500	5.77	34.06	-	3.20	26.86	126.4	0.932
934	3.62	34.42	-	3.46	600	5.10	34.10	-	3.34	26.97	116.2	1.054
1400	2.55	34.54	-	3.43	700	4.55	34.25	-	3.40	27.16	99.2	1.160
1870u	1.90	34.61	-	3.33	800	4.10	34.38	-	3.43	27.31	85.2	1.253
					1000	3.40	34.44	-	3.46	27.42	74.5	1.413
					1200	2.95	34.50	-	3.45	27.51	66.4	1.554
					1500	2.40	34.56	-	3.42	27.61	57.4	1.740

104 BLACK DOUGLAS; July 15, 1949; 1410 GCT; 46°15'N, 127°41'W; sounding, 1500 fm; wind, missing, force 2; weather, partly cloudy; sea, rough; wire angle, missing.

0	15.89	31.96E	5.81	0	15.89	31.96	5.81	23.46	443.6	0.000
10	15.78	31.98	5.69	10	15.78	31.98	5.69	23.49	440.1	0.044
25	13.17	32.12	6.44	20	14.22	32.03	6.24	23.87	404.7	0.087
50	10.66	32.48	6.54	30	12.60	32.30	6.49	24.40	354.3	0.124
75	7.31	32.56	6.53	50	10.66	32.48	6.54	24.90	307.6	0.191
100	6.76	32.68	6.07	75	7.31	32.56	6.53	25.48	252.0	0.260
148	7.59	33.58	3.11	100	6.76	32.68	6.07	25.65	236.2	0.322
197	7.09	33.82	2.55	150	7.59	33.61	3.09	26.26	179.2	0.426
292	7.29	33.93	1.80	200	7.11	33.83	2.52	26.50	157.0	0.509
384	6.49	33.95	1.34	250	7.24	33.90	2.08	26.54	154.2	0.587
563	5.00	34.09	0.58	300	7.25	33.94	1.76	26.57	151.9	0.664
1181u	3.07	34.38	0.33	400	6.30	33.95	1.27	26.71	140.4	0.810
				500	5.40	34.03	0.82	26.88	123.9	0.942
				600	4.78	34.12	0.54	27.03	110.7	1.060
				700	4.31	34.22	0.49	27.15	98.9	1.164
				800	3.94	34.29	0.46	27.25	90.2	1.258
				1000	3.40	34.36	0.39	27.36	80.4	1.430

E See footnote page 133.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

BLACK DOUGLAS; July 15, 1949; 0620 GCT; 46°15'N, 128°33'W; sounding, 1510 fm; wind, 020°, force 2; weather, overcast; sea, rough; wire angle, 0°. 105

0	15.9	32.12E	-	0	15.9	32.12	-	23.57	433.0	0.000
10	14.88	32.32	-	10	14.88	32.32	-	23.93	398.9	0.042
25	12.68	32.48	-	20	13.52	32.44	-	24.33	361.0	0.080
50	11.12	32.56	-	30	12.37	32.50	-	24.60	335.4	0.114
75	7.80	32.83	-	50	11.12	32.56	-	24.88	309.3	0.179
100	7.21	33.28	-	75	7.80	32.83	-	25.62	238.9	0.247
150	6.86	33.80	-	100	7.21	33.28	-	26.06	198.2	0.302
200	6.74	33.95	-	150	6.86	33.80	-	26.51	155.0	0.390
300	5.98	33.98	-	200	6.74	33.95	-	26.65	143.3	0.465
400	5.42	34.16	-	250	6.38	33.96	-	26.70	138.3	0.535
600	4.58	34.23	-	300	5.98	33.98	-	26.77	132.5	0.603
1250u	2.88	34.43	-	400	5.42	34.16	-	26.97	113.5	0.726
				500	4.98	34.21	-	27.07	105.2	0.835
				600	4.58	34.23	-	27.13	100.2	0.938
				700	4.24	34.27	-	27.20	94.3	1.035
				800	3.91	34.31	-	27.27	88.5	1.126
				1000	3.36	34.38	-	27.38	78.4	1.294

BLACK DOUGLAS; July 14, 1949; 2235 GCT; 46°15'N, 129°35'W; sounding, 1200 fm; force 0; weather, partly cloudy; sea, rough; wire angle, 0°. 106

0	15.8	32.61E	5.99	0	15.8	32.61	5.99	23.97	394.1	0.000
10	14.59	32.63	6.11	10	14.59	32.63	6.11	24.25	367.8	0.038
25	12.38	32.63	6.37	20	13.15	32.63	6.30	24.55	339.9	0.074
50	8.24	32.68	6.75	30	11.18	32.63	6.45	24.92	304.8	0.106
75	7.06	32.72	6.63	50	8.24	32.68	6.75	25.44	255.5	0.162
100	6.58	32.74	6.55	75	7.06	32.72	6.63	25.64	236.8	0.223
148	6.48	33.46	4.79	100	6.58	32.74	6.55	25.72	229.9	0.282
195	6.36	33.86	3.62	150	6.47	33.55	4.70	26.37	168.6	0.381
287	6.49	33.96	2.37	200	6.37	33.87	3.55	26.64	144.2	0.459
374	5.62	34.02	1.40	250	6.43	33.94	2.85	26.68	140.5	0.531
542	4.56	34.13	0.57	300	6.42	33.97	2.21	26.71	138.7	0.600
1090u	3.04	34.43	0.36	400	5.41	34.05	1.18	26.90	121.6	0.730
				500	4.80	34.11	0.69	27.02	110.7	0.846
				600	4.35	34.16	0.48	27.10	102.8	0.953
				700	4.00	34.23	0.41	27.20	94.4	1.052
				800	3.75	34.31	0.40	27.28	86.7	1.142
				1000	3.26	34.40	0.38	27.41	75.9	1.306

BLACK DOUGLAS; July 14, 1949; 1523 GCT; 46°15'N, 130°33'W; sounding, 500 fm; wind, missing, force 1; weather, overcast; sea, moderate; wire angle, 3°. 107

0	16.31	32.54E	-	0.97	0	16.31	32.54	-	0.97	23.81	410.1	0.000
10	15.27	32.54	-	0.93	10	15.27	32.54	-	0.93	24.04	388.4	0.040
25	-	32.58	-	0.95	20	14.00	32.57	-	0.94	24.33	360.8	0.077
50	8.90	32.59	-	1.07	30	12.90	32.59	-	0.97	24.56	338.4	0.112
75	7.30	32.59	-	1.24	50	8.90	32.59	-	1.07	25.26	271.8	0.173
100	6.70	32.61	-	1.38	75	7.30	32.59	-	1.24	25.50	249.7	0.239
148	6.46	33.37	-	2.04	100	6.70	32.61	-	1.38	25.60	240.7	0.300
197	6.34	33.78	-	2.15	150	6.45	33.42	-	2.05	26.27	178.0	0.405
291	6.43	33.89	-	2.62	200	6.35	33.79	-	2.16	26.58	149.9	0.486
381	5.63	33.96	-	3.13	250	6.42	33.86	-	2.39	26.62	146.2	0.561
555	4.62	34.13	-	3.31	300	6.40	33.89	-	2.67	26.65	144.5	0.633
911u	3.25	34.38	-	3.32	400	5.50	33.98	-	3.18	26.83	127.9	0.769
					500	4.90	34.08	-	3.29	26.98	114.1	0.890
					600	4.42	34.17	-	3.32	27.10	102.8	0.999
					700	3.97	34.25	-	3.32	27.21	92.5	1.096
					800	3.58	34.32	-	3.32	27.31	83.9	1.185
					1000	(3.12)	(34.41)	-	-	(27.43)	(73.6)	(1.342)

E See footnote page 133.

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
108	BLACK DOUGLAS; July 14, 1949; 0830 GCT; 46°15'N, 131°30'W; sounding, 1700 fm; wind, calm; weather, moderate fog; sea, slight; wire angle, 5°.											
0	16.44	32.59E	6.22		0	16.44	32.59	6.22		23.81	409.3	0.000
10	14.99	32.57	6.16		10	14.99	32.57	6.16		24.12	380.4	0.039
25	-	32.57	6.65		20	14.12	32.57	6.57		24.31	363.1	0.077
49	11.92	32.57	6.51		30	13.31	32.57	6.65		24.47	347.6	0.112
73	8.93	32.57	6.51		50	11.84	32.57	6.51		24.75	321.1	0.179
98	7.18	32.61	6.53		75	8.45	32.57	6.52		25.32	267.0	0.253
148	6.60	33.22	5.53		100	7.14	32.61	6.53		25.54	246.4	0.317
198	6.58	33.75	4.33		150	6.59	33.28	5.48		26.14	190.3	0.426
298	6.16	33.95	2.63		200	6.58	33.76	4.28		26.52	154.9	0.512
398	5.32	33.96	1.67		250	6.49	33.90	3.35		26.65	144.0	0.586
597	4.56	34.13	0.58		300	6.13	33.95	2.61		26.73	136.5	0.657
1196u	2.86	34.45	0.44		400	5.32	33.96	1.66		26.84	127.2	0.789
					500	4.90	34.03	0.97		26.94	117.8	0.912
					600	4.55	34.13	0.58		27.06	107.2	1.024
					700	4.18	34.21	0.53		27.16	97.7	1.127
					800	3.84	34.28	0.51		27.25	89.8	1.220
					1000	3.30	34.38	0.48		27.39	77.9	1.388
109	BLACK DOUGLAS; July 14, 1949; 0050 GCT; 46°15'N, 132°33'W; sounding, 1400 fm; wind, missing, force 1; weather, overcast; sea, high; wire angle, 10°.											
0	15.92	32.61E	-	0.93	0	15.92	32.61	-	0.93	23.95	396.6	0.000
9	14.61	32.54	-	0.66	10	14.32	32.54	-	0.66	24.25	369.0	0.038
24	12.33	32.57	-	0.65	20	12.90	32.56	-	0.65	24.54	340.4	0.074
48	9.14	32.57	-	1.00	30	11.74	32.57	-	0.66	24.77	318.9	0.107
73	7.54	32.63	-	1.17	50	8.95	32.58	-	1.01	25.25	273.3	0.166
97	7.13	32.77	-	1.36	75	7.48	32.64	-	1.18	25.51	248.2	0.231
146	7.10	33.46	-	1.90	100	7.12	32.78	-	1.38	25.68	234.0	0.291
193	7.02	33.80	-	-	150	7.10	33.47	-	1.92	26.22	182.8	0.396
288	7.12	33.87	-	2.25	200	7.03	33.81	-	2.09	26.50	157.4	0.480
381	6.37	33.91	-	2.74	250	7.08	33.85	-	2.17	26.52	155.8	0.559
563	4.70	34.04	-	3.09	300	7.10	33.88	-	2.29	26.54	154.5	0.637
1117u	3.14	34.45	-	3.26	400	6.15	33.92	-	2.82	26.70	140.2	0.784
					500	5.15	33.97	-	3.03	26.86	125.2	0.917
					600	4.56	34.07	-	3.10	27.01	111.8	1.035
					700	4.19	34.14	-	3.13	27.11	103.1	1.143
					800	3.89	34.21	-	3.16	27.19	95.5	1.242
					1000	3.40	34.36	-	3.22	27.36	80.4	1.418
110	BLACK DOUGLAS; July 13, 1949; 1755, 1405 GCT; 46°15'N, 133°24'W; sounding, 2100 fm; wind, 315°, force 1; weather, overcast; sea, rough; wire angle, missing, 0°.											
0	15.29	32.59E	5.77	0.72	0	15.29	32.59	5.77	0.72	24.07	384.8	0.000
10	14.41	32.61	5.91	0.86	10	14.41	32.61	5.91	0.86	24.28	365.7	0.038
25	12.23	32.61	6.05	0.85	20	13.25	32.61	6.01	0.86	24.51	343.3	0.073
50	8.60	32.66	6.14	1.30	30	11.22	32.62	6.07	0.85	24.91	306.1	0.106
74	7.35	32.66	6.02	1.40	50	8.60	32.66	6.14	1.30	25.37	262.2	0.162
98	6.86	32.70	6.06	1.48	75	7.30	32.66	6.02	1.41	25.56	244.4	0.226
147	7.17	33.37	4.41	2.01	100	6.86	32.71	6.05	1.49	25.66	235.7	0.286
196	6.97	33.80	3.17	2.22	150	7.17	33.42	4.33	2.03	26.17	187.5	0.392
293	6.83[a]	33.91	2.23	2.65	200	6.97	33.80	3.15	2.24	26.50	157.6	0.477
388	6.40	33.98	1.45	2.98	250	6.88	33.87	2.62	2.46	26.57	151.4	0.555
577	4.65	34.11	0.59	3.28	300	6.79	33.92	2.16	2.68	26.62	147.1	0.629
1150u	2.96	34.42	0.44	3.36	400	6.30	33.98	1.36	3.02	26.73	137.9	0.772
					500	5.31	34.05	0.78	3.20	26.91	121.4	0.902
862	3.66	34.18	0.33	-	600	4.53	34.13	0.55	3.29	27.06	107.1	1.016
1311	2.64	34.52	0.90	-	700	4.14	34.17	0.46	3.32	27.14	100.3	1.120
1751	1.99	34.58	1.33	-	800	3.82	34.18	0.35	3.34	27.18	97.0	1.219
2517u	1.70	34.63	2.11	-	1000	3.30	34.33	0.36	3.37	27.35	81.5	1.397
					1200	2.84	34.46	0.52	-	27.49	68.1	1.547
					1500	2.33	34.56	1.06	-	27.61	56.7	1.734
					2000	1.84	34.60	1.58	-	27.69	50.1	2.000
					2500	1.71	34.63	2.10	-	27.72	48.0	2.247

a) Middle thermometer reading of 7.07° rejected.

E See footnote page 133.

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

BLACK DOUGLAS; July 10, 1949; 0230 GCT; 44°23'N, 124°55'W; sounding, 740 fm; wind, calm, weather, overcast; sea, very rough; wire angle, 12°. 201

0	14.3	31.62E	5.90	0.63	0	14.3	31.62	5.90	0.63	23.54	435.8	0.000
8	14.2	31.65	5.85	0.63	10	14.2	31.66	5.84	0.63	23.60	431.5	0.043
22	14.04	31.70	6.10	0.68	20	14.06	31.69	6.09	0.67	23.64	426.5	0.086
46	8.54	32.65	5.48	1.34	30	9.72	31.96	6.06	0.74	24.65	330.7	0.124
70	7.98	33.24	4.38	2.23	50	8.36	32.77	5.33	1.58	25.49	250.4	0.182
92	8.02	33.62	3.38	2.27	75	7.95	33.33	4.13	2.24	25.99	203.8	0.239
139	7.93	33.89	2.42	2.51	100	8.03	33.70	3.13	2.30	26.27	177.9	0.287
184	7.44	33.98	1.93	2.66	150	7.83	33.92	2.27	2.56	27.47	158.9	0.371
271	6.56	34.06	1.36	2.91	200	7.25	34.01	1.78	2.70	26.62	146.0	0.447
357	6.06	34.09	1.15	3.19	250	6.75	34.05	1.46	2.84	26.73	136.6	0.518
534	5.22	34.16	0.66	3.24	300	6.37	34.07	1.29	3.02	26.79	130.7	0.584
811	4.11	34.33	0.33	3.36	400	5.84	34.11	1.02	3.22	26.89	122.2	0.711
1101	3.26	34.46	0.44	3.36	500	5.36	34.15	0.75	3.24	26.98	114.4	0.829
					600	4.93	34.21	0.54	3.27	27.08	105.9	0.939
					700	4.54	34.28	0.40	3.34	27.18	97.0	1.041
					800	4.15	34.33	0.33	3.36	27.26	89.5	1.134
					1000	3.54	34.41	0.40	3.36	27.38	78.4	1.303

BLACK DOUGLAS; July 10, 1949; 0810 GCT; 44°20'N, 125°50'W; sounding, 1580 fm; wind, 320°, force 3; weather, overcast; sea, very rough; wire angle, 29°. 202

0	14.81	33.13r E		0.77	0	14.81	-		0.77	-	452.6[a]	0.000
8	14.66	31.31		0.71	10	14.47	31.44		0.71	23.37	452.6	(0.045)
20	11.95	32.11		0.67	20	11.95	32.11		0.67	24.38	356.2	0.086
41	9.94	32.57		1.13	30	11.00	32.31		0.70	24.70	325.4	0.120
61	8.18	32.90		1.59	50	8.45	32.66		1.34	25.39	259.9	0.178
80	8.20	33.31		1.91	75	8.20	33.22		1.84	25.87	215.6	0.238
120	7.98	33.73		2.40	100	8.14	33.54		2.23	26.13	191.4	0.289
158	7.63	33.95		2.41	150	7.67	33.94		2.41	26.51	155.7	0.375
232	7.74r	33.86r		2.33r	200	7.48	33.97		2.45	26.56	151.3	0.452
304	6.96	34.00		2.67	250	7.34	33.98		2.52	26.59	149.5	0.527
445	5.59	34.13		3.22	300	7.04	33.99		2.65	26.64	145.4	0.601
672	4.50	34.28		3.47	400	5.94	34.09		3.09	26.86	125.2	0.736
941	3.59	34.42		3.53	500	5.26	34.16		3.32	27.00	112.2	0.855
					600	4.77	34.23		3.43	27.11	102.4	0.962
					700	4.39	34.30		3.48	27.21	93.6	1.060
					800	4.05	34.35		3.50	27.29	87.0	1.150
					1000	(3.45)	(34.45)		-	(27.43)	(74.4)	(1.312)

BLACK DOUGLAS; July 10, 1949; 1520 GCT; 44°17'N, 126°46'W; sounding, 1620 fm; wind, missing, force 4; weather, overcast; sea, rough; wire angle, missing. 203

0	16.40	30.37E		0.58	0	16.40	30.37		0.58	22.13	570.7	0.000
10	16.32	30.25		0.36r	10	16.32	30.25		0.60	22.05	578.0	0.058
25	16.31r	31.11		0.62	20	15.88	30.56		0.62	22.38	546.3	0.114
50	12.34	32.64		0.79	30	13.40	31.41		0.64	23.56	434.6	0.163
74	8.66	32.68		1.23	50	12.34	32.64		0.78	24.70	324.8	0.239
98	8.16	32.90		1.38	75	8.65	32.68		1.24	25.38	261.9	0.312
147	8.13	33.44		1.65	100	8.15	32.92		1.38	25.64	237.4	0.374
194	7.36	33.82		2.26	150	8.13	33.45		1.66	26.06	198.7	0.483
288	6.70	33.98		2.89	200	7.25	33.84		2.33	26.49	158.2	0.573
381	6.82	34.05		3.00	250	6.85	33.93		2.74	26.62	146.6	0.649
566	4.76	34.18		3.35	300	6.70	33.99		2.91	26.69	141.0	0.720
849	3.78	34.38		3.52	400	6.69	34.06		3.02	26.74	136.7	0.859
					500	5.38	34.13		3.22	26.96	116.2	0.986
					600	4.60	34.21		3.39	27.12	101.9	1.095
					700	4.17	34.28		3.47	27.22	92.5	1.192
					800	3.87	34.35		3.51	27.30	85.0	1.281
					1000	(3.46)	(34.44)		-	(27.42)	(75.2)	(1.442)

a) 10-meter value of $10^5\delta$ used.

E See footnote page 133.

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

204 BLACK DOUGLAS; July 10, 1949; 2240 GCT; 44°14'N, 127°44'W; sounding, 1580 fm; wind, missing, force 3; weather, partly cloudy; sea, rough; wire angle, 22°.

0	15.6	32.30E			0	15.6	32.30			23.78	412.8	0.000
8	15.54	32.43			10	15.35	32.51			24.00	392.2	0.040
22	13.44	32.65			20	13.93	32.65			24.40	353.5	0.078
46	11.08	32.59			30	12.50	32.64			24.67	327.4	0.112
69	9.04	32.68			50	10.70	32.59			24.97	300.0	0.174
92	7.47	32.68			75	8.30	32.68			25.43	256.7	0.244
140	7.38	33.51			100	7.41	32.70			26.58	243.5	0.306
187	7.66	33.89			150	7.43	33.65			26.32	173.9	0.411
282	6.60	33.97			200	7.63	33.91			26.49	158.2	0.494
376	7.20	34.04			250	7.00	33.95			26.61	147.3	0.570
566	4.85	34.13			300	6.66	33.98			26.69	140.2	0.642
1143u	3.36	34.47			400	7.10	34.06			26.69	142.6	0.783
					500	5.49	34.10			26.93	119.7	0.915
					600	4.70	34.18			27.08	105.3	1.027
					700	4.27	34.27			27.20	94.5	1.127
					800	3.95	34.35			27.30	85.8	1.217
					1000	3.55	34.44			27.41	76.4	1.379

205 BLACK DOUGLAS; July 11, 1949; 0610 GCT; 44°12'N, 128°37'W; sounding, 1560 fm; wind, missing, force 3; weather, cloudy; sea, rough; wire angle, 18°.

0	15.49	32.73E	6.02	0.68	0	15.49	32.73	6.02	0.68	24.14	378.8	0.000
8	15.18	32.68	5.54	0.53	10	15.00	32.68	5.55	0.53	24.21	372.5	0.038
22	13.77	32.66	6.08	0.53	20	14.09	32.66	5.96	0.53	24.38	355.9	0.074
46	10.23	32.63	6.67	0.74	30	12.70	32.65	6.34	0.54	24.65	330.2	0.108
69	10.68r	32.65	6.34	0.78	50	9.55	32.63	6.66	0.75	25.20	278.7	0.169
92	8.44	32.66	6.33	0.83	75	8.69	32.66	6.34	0.79	25.36	264.0	0.237
138	8.30	33.69	3.44	1.88	100	8.40	32.66	6.29	0.83	25.40	260.0	0.303
183	7.91	33.88	2.72	2.05	150	8.22	33.18	3.14	1.95	25.83	212.0	0.421
271	7.74	33.97	2.36	2.28	200	7.78	33.92	2.63	2.09	26.48	159.3	0.513
358	6.43	34.04	1.64	2.61	250	7.88	33.96	2.46	2.22	26.50	158.6	0.592
532	5.60	34.13	0.74	2.95	300	6.90	33.99	2.20	2.40	26.66	143.6	0.668
1078u	3.49	34.45	0.41	3.09	400	6.57	34.07	1.31	2.71	26.77	134.6	0.808
					500	5.89	34.12	0.83	2.92	26.89	123.2	0.937
					600	5.09	34.17	0.62	3.01	27.03	110.8	1.054
					700	4.56	34.24	0.53	3.05	27.15	100.0	1.158
					800	4.16	34.32	0.50	3.07	27.25	90.3	1.254
					1000	3.64	34.42	0.44	3.09	27.38	78.9	1.423

206 BLACK DOUGLAS; July 11, 1949; 1300 GCT; 44°09'N, 129°35'W; sounding, 1300 fm; wind, missing, force 3; weather, fog; sea, rough; wire angle, 10°.

0	15.62	32.74E	5.97	0.63	0	15.62	32.74	5.97	0.63	24.12	381.1	0.000
9	15.84	32.75	5.46	0.57	10	15.75	32.75	5.45	0.56	24.10	383.1	0.038
24	13.99	32.75	5.62	0.52	20	14.50	32.75	5.54	0.52	24.36	357.5	0.075
48	9.22	32.70	6.10	0.82	30	12.50	32.74	5.75	0.53	24.75	320.0	0.109
73	7.88	32.66	6.17	1.15	50	8.90	32.69	6.11	0.84	25.34	264.3	0.168
97	7.56	32.75	6.17	1.69	75	7.82	32.66	6.17	1.18	25.49	251.5	0.232
147	7.33	33.42	4.70	1.70	100	7.54	32.77	6.15	1.69	25.61	240.0	0.293
196	7.50	33.80	3.95	1.90	150	7.34	33.46	4.63	1.70	26.18	186.8	0.400
295	5.94	33.95	2.69	2.49r	200	7.49	33.81	3.89	1.98	26.44	163.3	0.488
394	5.32	34.00	1.46	2.81	250	6.58	33.91	3.23	2.25	26.64	144.5	0.565
591	4.43	34.23	0.46	3.21	300	5.90	33.95	2.61	2.51	26.76	133.8	0.634
1186u	2.86	34.51	0.53	3.24	400	5.30	34.00	1.39	2.83	26.87	124.1	0.763
					500	4.81	34.12	0.66	3.12	27.02	110.2	0.880
					600	4.40	34.24	0.45	3.21	27.16	97.5	0.984
					700	4.05	34.31	0.47	3.22	27.25	89.2	1.077
					800	3.75	34.37	0.48	3.22	27.33	82.1	1.163
					1000	3.26	34.46	0.51	3.23	27.45	71.6	1.317

E See footnote page 133.

OBSERVED					INTERPOLATED					COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P µg.at/L	Z m	T °C	S ‰	O_2 ml/L	PO_4-P µg at/L	σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m

BLACK DOUGLAS; July 11, 1949; 2010 GCT; 44°06'N, 130°29'W; sounding, 1800 fm; wind, missing, force 2; weather, moderate fog in last hour; sea, rough; wire angle, 23°. 207

0	15.91r	32.72E	5.99	0	(16.35)	32.72	5.99	(23.94)	(397.7)	0.000
8	16.14	32.70	5.02	10	15.93	32.70	5.02	24.01	390.5	(0.039)
22	13.96	32.70	6.00	20	14.17	32.70	5.98	24.40	354.6	0.077
45	12.32	32.66	6.30	30	13.42	32.70	6.18	24.35	340.2	0.111
68	8.59	32.68	6.18	50	11.80	32.66	6.30	24.83	313.8	0.177
92	7.43	32.70	5.99	75	7.95	32.69	6.14	25.48	251.0	0.247
138	7.36	33.55	4.03	100	7.40	32.81	5.65	25.66	235.4	0.308
184	6.91	33.93	3.52	150	7.30	33.69	3.87	26.37	169.1	0.410
277	6.01	33.98	2.21	200	6.73	33.96	3.33	26.66	142.3	0.487
370	5.23	34.00	1.37	250	6.23	33.98	2.63	26.74	135.0	0.557
556	4.51	34.16	0.60	300	5.78	33.98	1.94	26.80	130.3	0.623
1125u	2.92	34.45	0.42	400	5.06	34.02	1.20	26.91	119.6	0.747
				500	4.69	34.11	0.73	27.03	109.3	0.862
				600	4.36	34.19	0.58	27.13	100.7	0.967
				700	4.05	34.26	0.56	27.22	92.8	1.063
				800	3.76	34.31	0.53	27.28	86.6	1.153
				1000	3.25	34.40	0.45	27.41	75.8	1.316

BLACK DOUGLAS; July 12, 1949; 0525 GCT; 44°03'N, 131°24'W; sounding, 1800 fm; wind, 320°, force 3; weather, fog; sea, very rough; wire angle, 17°. 208

0	16.00	32.68E	0.43	0	16.00	32.68	0.43	23.99	393.2	0.000
9	15.88	32.70	0.64	10	15.80	32.70	0.64	24.04	387.8	0.039
23	13.67	32.68	0.29	20	13.95	32.68	0.32	24.43	351.7	0.076
47	10.45	32.75	0.75	30	12.40	32.69	0.30	24.73	321.8	0.110
71	8.61	32.68	1.01	50	10.26	32.75	0.84	25.17	281.0	0.170
95	7.98	32.74	1.03	75	8.51	32.68	1.01	25.40	259.7	0.238
143	7.15	33.03	1.22	100	7.88	32.77	1.03	25.57	244.4	0.301
191	6.87	33.58	1.54	150	7.10	33.11	1.17	25.94	209.6	0.414
286	6.04	33.95	2.15	200	6.83	33.65	1.60	26.40	166.3	0.508
382	5.07	34.04	2.69	250	6.41	33.89	1.92	26.65	144.0	0.585
573	4.13	34.18	2.98	300	5.86	33.97	2.24	26.78	131.8	0.655
1155u	3.18	34.51	3.40	400	4.96	34.05	2.73	26.95	115.8	0.779
				500	4.41	34.13	2.85	27.07	104.9	0.889
				600	4.03	34.20	2.96	27.17	96.1	0.989
				700	3.76	34.27	3.05	27.25	88.8	1.082
				800	3.56	34.33	3.14	27.32	82.9	1.167
				1000	3.30	34.44	3.29	27.43	73.5	1.324

BLACK DOUGLAS; July 12, 1949; 1300 GCT; 44°01'N, 132°20'W; sounding, 2000 fm; wind, 120°, force 1; weather, overcast; sea, moderate; wire angle, missing. 209

0	15.72	32.70E	5.93	0.67	0	15.72	32.70	5.93	0.67	24.07	385.8	0.000
10	15.59	32.66	5.50	0.63	10	15.59	32.66	5.50	0.63	24.06	386.3	0.039
25	13.44	32.70	5.51	0.67	20	14.50	32.70	5.50	0.64	24.32	361.1	0.076
50	10.71	32.69	5.86	0.88	30	12.92	32.70	5.53	0.71	24.65	330.8	0.111
75	8.94	32.72	5.89	1.07	50	10.71	32.69	5.86	0.88	25.04	292.8	0.173
100	7.81	32.68	6.08	1.15	75	8.94	32.72	5.89	1.07	25.36	263.1	0.242
150	6.92	33.15	5.51	1.53	100	7.81	32.68	6.08	1.15	25.51	250.1	0.306
200	6.71	33.75	4.40	1.83	150	6.92	33.15	5.51	1.53	26.00	204.2	0.420
300	6.07	33.95	2.23	2.54	200	6.71	33.75	4.40	1.83	26.50	157.2	0.510
400	5.38	34.00	1.58	2.90	250	6.39	33.88	2.87	2.26	26.64	144.4	0.585
600	3.99	-	0.80	3.13	300	6.07	33.95	2.23	2.54	26.74	135.9	0.656
1200u	2.78	34.47	0.46	3.21	400	5.38	34.00	1.58	2.90	26.86	125.1	0.786
					500	4.58	34.06	1.09	3.06	27.00	111.9	0.905
					600	3.99	34.15	0.80	3.13	27.13	99.4	1.011
					700	3.61	34.23	0.75	3.16	27.23	90.2	1.105
					800	3.35	34.29	0.69	3.16	27.31	83.5	1.192
					1000	3.06	34.38	0.58	3.19	27.41	75.0	1.350

E See footnote page 133.

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4907

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

210 BLACK DOUGLAS; July 12, 1949; 1943 GCT; 43°58'N, 133°15'W; sounding, 2010 fm; wind, 320°, force 2; weather, overcast; sea, rough; wire angle, missing.

0	15.74	32.68E	0	15.74	32.68		24.05	387.7	0.000
10	15.63	32.65	10	15.63	32.65		24.04	387.8	0.039
25	13.67	32.72	20	14.95	32.70		24.23	370.3	0.077
50	10.86	32.66	30	12.95	32.72		24.66	329.8	0.112
75	8.98	32.68	50	10.86	32.66		25.00	297.6	0.174
100	8.44	32.75	75	8.98	32.68		25.33	266.7	0.245
150	7.56	33.01r	100	8.44	32.75		25.46	254.3	0.310
200	6.95	33.60	150	7.56	33.16		25.92	211.9	0.427
300	7.40[a]	33.87	200	6.95	33.60		26.34	172.2	0.523
400	7.01r	33.91	250		33.80				
600u	-	34.13	300		33.87				
			400		33.91				
			500		34.01				
			600		34.13				

303 BLACK DOUGLAS; July 8, 1949; 2232, 1937 GCT; 42°30'N, 126°48'W; sounding, 1500 fm; wind, missing, force 5; weather, overcast; sea, high; wire angle 32°, 44°.

0	15.0	32.38E	0	15.0	32.38		23.98	393.8	0.000
8	14.92	32.23	10	14.91	32.23		23.89	403.7	0.040
20	14.76	32.30	20	14.76	32.30		23.94	395.7	0.080
41	11.00	32.59	30	12.19	32.44		24.58	336.5	0.116
63	9.75	32.83	50	10.44	32.69		25.10	288.6	0.179
84	8.78	32.97	75	9.13	32.93		25.50	250.6	0.246
126	8.54	33.35	100	8.65	33.09		25.70	232.0	0.307
166	11.78r	33.78	150	8.35	33.70		26.22	183.3	0.411
240	7.28	33.89	200	7.86	33.83		26.40	167.2	0.498
307	6.09	34.00	250	7.10	33.91		26.57	151.4	0.577
442	5.22	34.14	300	6.20	33.99		26.75	134.4	0.649
663	4.36	34.29	400	5.40	34.10		26.94	117.6	0.775
928	3.65	34.49r	500	4.97	34.18		27.05	107.5	0.888
			600	4.60	34.25		27.15	99.0	0.991
795	4.04	34.33	700	4.27	34.30		27.22	92.2	1.086
1205	3.04	34.51	800	4.00	34.34		27.28	87.0	1.176
913p	3.68	34.49r	1000	3.50	34.45		27.42	75.0	1.338
			1200	3.05	34.51		27.51	66.7	1.480

304 BLACK DOUGLAS; July 8, 1949; 1225 GCT; 42°25'N, 127°41'W; sounding, 1600 fm; wind, missing, force 4; weather, overcast; sea, high; wire angle, 10°.

0	15.80	32.32E	4.74	0	15.80	32.32	4.74	23.75	415.3	0.000
10	15.14	32.36	5.16	10	15.14	32.36	5.16	23.93	398.8	0.041
24	14.28	32.57	5.04	20	14.59	32.54	5.12	24.18	374.6	0.079
48	11.87	32.74	4.70	30	13.87	32.62	4.96	24.39	354.7	0.116
73	9.14	32.88	5.13	50	11.52	32.75	4.70	24.95	302.4	0.182
97	8.62	33.10	3.50	75	8.93	32.91	5.13	25.52	249.0	0.250
145	7.98	33.82	2.48	100	8.59	33.13	3.14	25.74	228.0	0.310
190	7.07	33.89	2.60	150	7.90	33.84	2.50	26.40	166.3	0.409
278	8.10r	33.89	2.75	200	7.01	33.90	2.62	26.57	150.3	0.488
361	6.44	33.95	2.62	250	6.79	33.89	2.72	26.60	148.9	0.563
538	5.53	34.16	0.52	300	6.63	33.90	2.75	26.63	146.5	0.636
818	4.15	34.29	0.31	400	6.25	34.00	2.19	26.75	135.7	0.777
1112	3.24	34.49	0.57	500	5.75	34.13	0.72	26.92	120.8	0.906
				600	5.24	34.20	0.37	27.04	110.4	1.021
				700	4.74	34.24	0.30	27.12	102.2	1.128
				800	4.25	34.28	0.31	27.21	94.4	1.226
				1000	3.53	34.41	0.44	27.39	78.1	1.398

a) This and middle thermometer reading of 7.95° rejected.

E See footnote page 133.

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

BLACK DOUGLAS; July 8, 1949; 0535 GCT; 42°21'N, 128°35'W; sounding, 1800 fm; wind, missing, force 3; weather, overcast; sea, rough; wire angle, 5°. 305

0	15.41	32.64E	0	15.41	32.64		24.08	383.7	0.000
10	14.92	32.64	10	14.92	32.64		24.19	373.9	0.038
25	14.20	32.64	20	14.50	32.64		24.27	365.5	0.075
50	11.52	32.66	30	13.80	32.64		24.42	352.0	0.111
74	9.00	32.75	50	11.52	32.66		24.87	309.4	0.177
99	8.56	33.10	75	8.98	32.77		25.40	259.9	0.248
149	8.14	33.69	100	8.55	33.14		25.75	226.8	0.309
199	7.94	33.95	150	8.13	33.71		26.26	179.3	0.411
298	6.65	34.05	200	7.92	33.96		26.49	158.2	0.495
398	6.30	34.16	250	7.31	34.02		26.63	146.1	0.570
597	4.84	34.24	300	6.65	34.05		26.74	135.8	0.641
896	3.89	34.38	400	6.28	34.16		26.87	124.2	0.771
1196u	3.12	34.48	500	5.60	34.21		27.00	113.1	0.890
			600	4.84	34.24		27.11	102.6	0.998
			700	4.43	34.30		27.21	93.9	1.096
			800	4.14	34.34		27.27	88.5	1.187
			1000	3.61	34.42		27.39	78.4	1.354

BLACK DOUGLAS; July 7, 1949; 2250 GCT; 42°16'N, 129°30'W; sounding, 1825 fm; wind, missing; weather, partly cloudy; sea, rough; wire angle, 0°. 306

0	16.85	32.63E	2.95r	0	16.85	32.63	(5.70)	23.76	415.4	0.000
10	14.44	32.59	5.70	10	14.44	32.59	5.70	24.25	367.7	0.039
25	-	32.65	5.86	20	14.26	32.62	5.79	24.32	362.1	0.076
50	13.73	32.84	5.84	30	14.14	32.71	5.88	24.41	353.7	0.112
75	12.08	32.69	6.13	50	13.73	32.84	5.84	24.59	336.5	0.180
100	10.24	32.79	5.74	75	12.08	32.69	6.13	24.79	316.9	0.262
150	7.92	33.33	4.74	100	10.24	32.79	5.74	25.21	279.1	0.337
200	6.84	33.89	3.34	150	7.92	33.33	4.74	26.00	204.5	0.457
300	5.68	33.93	2.44	200	6.84	33.89	3.34	26.59	148.9	0.546
400	4.97	34.02	1.38	250	6.21	33.91	2.86	26.69	139.8	0.618
600	4.32	34.18	0.53	300	5.68	33.93	2.44	26.77	132.4	0.686
900	3.65	34.39	0.35	400	4.97	34.02	1.38	27.92	119.2	0.812
1200u	2.93	34.42	0.58	500	4.59	34.10	0.82	27.03	108.9	0.926
				600	4.32	34.18	0.53	27.12	101.0	1.031
				700	4.07	34.26	0.42	27.21	92.8	1.128
				800	3.84	34.34	0.37	27.30	85.3	1.217
				1000	3.40	34.41	-	27.40	76.7	1.379

BLACK DOUGLAS; July 7, 1949; 1640 GCT; 42°11'N, 130°22'W; sounding, 1900 fm; wind, missing; weather, overcast; sea, moderate; wire angle, missing. 307

0	-	32.76E	0	(14.77)	32.76		(24.32)	(361.9)	0.000
10	14.60	32.77	10	14.60	32.77		24.36	358.1	(0.036)
25	13.87	32.76	20	14.17	32.77		24.45	349.6	0.071
50	10.29	32.68	30	13.25	32.75		24.62	333.5	0.106
75	8.56	32.71	50	10.29	32.68		25.11	286.6	0.168
100	8.01	32.72	75	8.56	32.71		25.42	258.5	0.236
149	7.40	33.28	100	8.01	32.72		25.50	250.4	0.299
199	7.09	33.76	150	7.40	33.31		26.06	198.8	0.412
298	5.92	33.91	200	7.07	33.76		26.45	161.6	0.502
396	5.20	33.98	250	6.50	33.86		26.61	147.2	0.578
592	4.37	34.15	300	5.90	33.92		26.74	135.7	0.650
887	3.56	34.33	400	5.18	33.98		26.87	123.8	0.780
1183	2.91	34.47	500	4.71	34.06		26.99	113.3	0.898
			600	4.35	34.16		27.10	102.8	1.006
			700	4.06	34.23		27.19	94.9	1.105
			800	3.80	34.29		27.26	88.6	1.197
			1000	3.30	34.39		27.39	77.1	1.362

E See footnote page 133.

SIO

CCOFI
4907

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
308	BLACK DOUGLAS; July 7, 1949; 0945 GCT; 42°06'N, 131°16'W; sounding, 2100 fm; wind, missing, force 1; weather, overcast; sea, rough; wire angle, 2°.											
0	15.25	32.74E	3.27r		0	15.25	32.74	(5.14)		24.20	373.3	0.000
10	14.37	32.74	5.14		10	14.37	32.74	5.14		24.39	355.6	0.036
25	13.90	32.68	5.55		20	14.00	32.69	5.32		24.42	352.2	0.072
50	10.63	32.75	6.10		30	13.72	32.68	5.73		24.48	347.4	0.107
75	8.52	32.68	5.86		50	10.63	32.75	6.10		25.11	287.6	0.170
100	7.95	32.71	5.40		75	8.52	32.68	5.86		25.40	259.9	0.239
121p	7.84	33.21	4.50		100	7.95	32.71	5.40		25.51	250.3	0.303
150	7.36	33.28	5.00		150	7.36	33.28	5.00		26.04	200.4	0.415
200	7.30	33.84	3.74		200	7.30	33.84	3.74		26.49	158.6	0.505
300	6.21	33.93	2.89		250	6.80	33.92	3.26		26.62	146.8	0.581
400	5.19	33.95	1.83		300	6.21	33.93	2.89		26.70	139.0	0.653
600	4.27	34.13	0.63		400	5.19	33.95	1.83		26.86	126.0	0.785
900u	3.56	34.34	0.28		500	4.60	34.02	1.02		26.97	115.1	0.906
					600	4.27	34.13	0.63		27.09	104.1	1.016
					700	4.00	34.22	0.44		27.19	95.1	1.115
					800	3.76	34.29	0.36		27.27	88.1	1.207
					1000	(3.31)	(34.38)	-		(27.38)	(78.0)	(1.373)
309	BLACK DOUGLAS; July 7, 1949; 0320 GCT; 42°02'N, 132°10'W; sounding, 2000 fm; wind, missing, force 2; weather, partly cloudy; sea, moderate; wire angle, 4°.											
0	14.95	32.72E	5.64		0	14.95	32.72	5.64		24.25	368.6	0.000
10	-	32.66·	6.00		10	14.80	32.66	6.00		24.23	369.9	0.037
25	14.21	32.70	6.04		20	14.50	32.69	6.03		24.32	362.1	0.074
49	11.66	32.74	6.55		30	13.55	32.72	6.09		24.54	341.5	0.109
74	10.02	32.75	6.30		50	11.65	32.74	6.56		24.92	305.5	0.173
98	8.89	32.77	6.34		75	10.01	32.75	6.30		25.22	277.9	0.246
148	7.58	33.26	5.21		100	8.79	32.78	6.33		25.44	257.0	0.313
198	7.05	33.68	5.02		150	7.53	33.28	5.20		26.01	202.9	0.429
298	6.50	33.93	3.53		200	7.02	33.70	5.00		26.41	165.4	0.520
398	5.58	33.98	2.39		250	6.78	33.87	4.44		26.58	150.3	0.599
597	4.43	34.13	0.85		300	6.48	33.93	3.50		26.67	142.3	0.672
896	3.69	34.33	0.33		400	5.57	33.98	2.38		26.82	128.5	0.808
1196u	2.99	34.51	0.38		500	4.92	34.04	1.50		26.95	117.4	0.931
					600	4.41	34.13	0.83		27.07	105.8	1.043
					700	4.08	34.20	0.50		27.17	97.4	1.144
					800	3.81	34.27	0.37		27.25	90.3	1.238
					1000	3.38	34.40	0.36		27.39	77.2	1.406
310	BLACK DOUGLAS; July 6, 1949; 2055, 1525, 1759 GCT; 41°57'N, 133°03'W; sounding, 1600 fm; wind, 350°, force 1; weather, overcast; sea, rough; wire angle, 4°, 14°, missing.											
0	15.20	32.88E	5.87		0	15.20	32.88	5.87		24.32	362.0	0.000
10	15.14	32.86	5.32		10	15.14	32.86	5.32		24.31	362.7	0.036
25	-	32.86	5.87		20	14.75	32.86	5.60		24.40	354.8	0.072
50	12.78	32.86	6.52		30	14.15	32.86	6.05		24.53	342.9	0.107
74	10.67	32.84	6.00		50	12.78	32.86	6.52		24.80	317.0	0.173
99	9.88	32.84	5.88		75	10.65	32.84	6.00		25.18	281.6	0.248
148	8.20	33.26	4.95		100	9.85	32.84	5.88		25.31	269.0	0.317
198	7.68	33.78	4.60		150	8.17	33.30	4.95		25.94	210.3	0.437
298	6.66	33.95	3.47		200	7.66	33.78	4.58		26.39	168.1	0.531
398	5.52	34.00	2.29		250	7.17	33.90	4.11		26.55	153.2	0.611
597	4.29	34.11	0.98		300	6.65	33.95	3.45		26.66	143.1	0.686
897	3.58	34.34	0.29		400	5.50	34.00	2.27		26.85	126.2	0.819
1197	2.87	34.45	0.42		500	4.73	34.05	1.50		26.98	114.3	0.941
					600	4.28	34.11	0.98		27.07	105.7	1.051
995	3.37	34.40	0.34		700	4.04	34.18	0.64		27.15	98.4	1.152
1492	2.46	34.56	0.98		800	3.75	34.26	0.42		27.24	90.3	1.247
1992	1.91	34.65	1.44		1000	3.33	34.40	0.35		27.40	76.6	1.414
					1200	2.87	34.47	0.43		27.50	67.7	1.558
2440	1.72	34.63	2.09		1500	2.45	34.56	0.99		27.61	58.1	1.747
2935	1.57	34.70	2.43		2000	1.90	34.65	1.48		27.72	47.2	2.009
					2500	1.68	34.68	2.10		27.76	43.9	2.238

E See footnote page 133.

BLACK DOUGLAS; July 2, 1949; 1440 GCT; 40°50'N, 124°50'W; sounding, 1150 fm; wind, 350°, force 5; weather, overcast; sea, very rough; wire angle, 35°. 401

OBSERVED Z m	T °C	S ‰	O_2 ml/L	PO_4-P µg at/L	INTERPOLATED Z m	T °C	S ‰	O_2 ml/L	PO_4-P µg at/L	COMPUTED σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m
0	10.89	33.73E	6.50		0	10.89	33.73	6.50		25.83	218.2	0.000
8	10.75	33.64	5.34		10	10.75	33.64	5.28		25.78	222.9	0.022
20	10.71	33.66	5.08		20	10.71	33.66	5.08		25.80	221.0	0.044
60	10.33[a]	33.48	4.46		30	10.65	33.64	4.91		25.80	221.7	0.066
80	8.61	33.55	1.45r		50	10.50	33.48	4.60		25.70	231.3	0.112
120	8.31	33.69	3.07		75	8.75	33.54	4.15		26.04	199.9	0.166
239	7.18	33.93	2.54		100	8.42	33.64	3.42		26.17	187.9	0.214
320	6.04	34.09	1.03		150	8.14	33.75	2.94		26.29	176.5	0.305
484	5.51	34.18	0.55		200	7.69	33.85	2.75		26.44	163.3	0.390
739	4.49	34.34	0.33		250	7.02	33.95	2.42		26.61	147.4	0.468
1050u	3.54	34.42	0.56		300	6.20	34.05	1.32		26.80	130.0	0.538
					400	5.79	34.15	0.70		26.93	118.6	0.662
					500	5.43	34.18	0.52		27.00	113.1	0.778
					600	5.00	34.24	0.38		27.10	104.5	0.886
					700	4.62	34.32	0.33		27.20	94.8	0.986
					800	4.27	34.37	0.35		27.28	87.9	1.077
					1000	3.66	34.41	0.50		27.37	79.7	1.245

BLACK DOUGLAS; July 2, 1949; 2315 GCT; 40°41'N, 125°41'W; sounding, 1650 fm; wind, missing, force 5; weather, cloudless; sea, very rough; wire angle, 15°. 402

OBSERVED Z m	T °C	S ‰	O_2 ml/L	PO_4-P µg at/L	INTERPOLATED Z m	T °C	S ‰	O_2 ml/L	PO_4-P µg at/L	COMPUTED σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m
0	12.4	33.15E	6.17		0	12.4	33.15	6.17		25.10	287.8	0.000
9	12.42	33.13	5.80		10	12.42	33.13	5.77		25.08	289.8	0.029
23	12.41	33.13	5.04		20	12.43	33.13	5.12		25.08	290.1	0.058
48	9.47	33.22	4.77		30	12.35	33.14	4.94		25.10	288.1	0.087
72	8.57	33.57	4.53		50	9.15	33.29	4.75		25.78	223.8	0.138
96	8.53	33.67	3.92		75	8.58	33.61	4.47		26.12	192.1	0.190
144	8.66r	33.69	3.98		100	8.50	33.67	3.91		26.17	186.9	0.237
192	7.38	33.98	2.22		150	7.95	33.70	3.80		26.28	177.5	0.328
289	6.85	34.00	1.32		200	7.33	33.99	2.01		26.60	147.8	0.410
386	5.72	34.12	1.32		250	7.06	33.98	1.47		26.63	145.6	0.483
579	4.66u	34.18	0.81		300	6.75	34.02	1.32		26.70	139.3	0.555
869	2.98[b]	34.43	0.45		400	5.60	34.13	1.31		26.94	117.7	0.682
1207u	-	34.51	0.96		500	4.99	34.16	1.04		27.03	109.1	0.797
					600	4.60	34.19	0.77		27.10	103.4	0.903
					700	4.30	34.29	0.59		27.21	93.4	1.001
					800	4.01	34.39	0.49		27.32	83.5	1.090
					1000	3.49	34.47	0.57		27.44	73.3	1.246

BLACK DOUGLAS; July 3, 1949; 1255 GCT; 40°22'N, 127°22'W; sounding, 750 fm; wind, 350°, force 5; weather, overcast; sea, very rough; wire angle, 30°. 404

OBSERVED Z m	T °C	S ‰	O_2 ml/L	PO_4-P µg at/L	INTERPOLATED Z m	T °C	S ‰	O_2 ml/L	PO_4-P µg at/L	COMPUTED σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m
0	14.0	32.83E	7.06		0	14.0	32.83	7.06		24.54	340.6	0.000
9	13.90	32.84	6.51		10	13.90	32.84	6.51		24.56	339.1	0.034
20	13.92	32.90	5.26		20	13.92	32.90	5.26		24.61	335.0	0.068
41	12.17	32.88	5.41		30	13.85	32.89	5.29		24.61	334.7	0.101
62	10.26	33.35	4.46		50	10.85	33.03	5.41		25.29	270.3	0.162
83	9.81	33.42	3.93		75	9.95	33.40	4.12		25.73	228.7	0.224
122	12.72r	-	-		100	9.60	33.47	3.53		25.85	218.4	0.280
161	8.92	33.66	2.62		150	9.04	33.62	2.70		26.05	199.6	0.385
234	8.10	33.89	2.54		200	8.50	33.77	2.57		26.25	181.1	0.479
301	-	34.09	1.67		250	7.91	33.94	2.44		26.48	160.5	0.565
428	6.06	34.09	1.49		300	7.33	34.09	1.68		26.68	141.8	0.641
657	5.02	34.29	0.42		400	6.29	34.08	1.54		26.81	130.2	0.777
969	3.88	-	-		500	5.70	34.14	1.22		26.93	119.6	0.902
					600	5.27	34.24	1.70		27.06	107.8	1.015
					700	4.85	-	-		-	-	-
					800	4.46	-	-		-	-	-

a) Middle thermometer reading of 9.94° rejected.
b) Value used at 1207 meters depth; Nansen bottle slipped down wire to last bottle, knocking off its thermometer holder.

E See footnote page 133.

SIO

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	µg at/L	m	°C	‰	ml/L	µg at/L	g/L	$10^5 cm^3/g$	dyn. m

405 BLACK DOUGLAS; July 3, 1949; 2055 GCT; 40°14'N, 128°15'W; sounding, 2545 fm; wind, missing, force 3; weather, overcast; sea, very rough; wire angle, 3°.

0	14.50	32.97E		0	14.50	32.97		24.54	341.2	0.000
10	14.34	32.95		10	14.34	32.95		24.55	339.7	0.034
25	14.77	32.92		20	14.34	32.93		24.54	341.3	0.068
50	14.19	32.94		30	14.35	32.92		24.53	342.5	0.102
75	12.76	32.90		50	14.19	32.94		24.58	338.3	0.170
99	9.08	33.26		75	12.76	32.90		24.84	314.2	0.252
149	8.83[a]	33.51		100	9.07	33.26		25.77	225.9	0.320
198	7.98	34.00		150	8.81	33.52		26.01	203.6	0.427
296	6.94	34.04		200	7.94	34.00		26.52	155.6	0.517
392	6.21	34.14		250	7.35	34.01		26.61	147.4	0.592
581	5.33	33.98r		300	6.89	34.04		26.70	139.7	0.664
863	4.04	34.40		400	6.16	34.14		26.88	123.9	0.796
1157u	3.13	34.49		500	5.69	34.21		26.99	114.1	0.915
				600	5.23	34.27		27.09	105.2	1.025
				700	4.75	34.32		27.19	96.3	1.125
				800	4.30	34.37		27.28	88.2	1.218
				1000	3.55	34.45		27.42	75.5	1.381

406 BLACK DOUGLAS; July 4, 1949; 0453 GCT; 40°05'N, 129°04'W; sounding, 1700 fm; wind, 350°, force 2; weather, overcast; sea, slight; wire angle, 30°.

0	13.95	32.90E	5.67	0	13.95	32.90	5.67	24.60	335.3	0.000
8	13.99	32.82	4.13	10	14.00	32.82	4.14	24.52	342.6	0.034
21	14.07	32.83	4.75	20	14.07	32.83	4.70	24.52	343.2	0.068
42	13.67	32.84	6.04	30	14.00	32.84	5.41	24.54	341.6	0.102
63	11.56	32.83	5.28	50	13.26	32.84	5.91	24.69	327.4	0.169
84	9.61	32.81	4.49	75	10.00	32.82	4.69	25.27	272.6	0.244
126	8.46	33.17	4.31	100	9.03	32.83	4.40	25.44	256.9	0.310
166	7.52	33.57	3.02	150	7.87	33.42	3.55	26.07	197.1	0.424
245	7.00	33.95	2.81	200	7.32	33.82	2.95	26.47	160.3	0.513
330	5.91	34.00	2.07	250	6.92	33.95	2.77	26.62	146.0	0.590
487	-	34.14	0.87	300	6.20	33.98	2.34	26.74	135.1	0.660
757	4.22	34.33	0.32	400	5.51	34.06	1.49	26.89	122.0	0.789
1049u	3.32	34.49	0.44	500	5.10	34.15	0.78	27.01	111.2	0.906
				600	4.74	34.22	0.45	27.11	102.9	1.013
				700	4.40	34.29	0.35	27.20	94.6	1.111
				800	4.07	34.36	0.33	27.30	86.3	1.202
				1000	3.50	34.47	0.41	27.44	73.5	1.361

407 BLACK DOUGLAS; July 4, 1949; 1530 GCT; 39°56'N, 129°55'W; sounding, 2250 fm; wind, missing, force 2; weather, overcast; sea, rough; wire angle, 25°.

0	15.15	32.86E	5.18	0	15.15	32.86	5.18	24.31	362.6	0.000
9	14.83	32.88	4.23	10	14.83	32.88	4.22	24.40	354.6	0.036
22	14.72	32.86	4.37	20	14.72	32.87	4.33	24.41	353.5	0.071
45	13.59	32.83	4.67	30	14.60	32.85	4.48	24.42	352.7	0.107
67	11.84	32.84	5.17	50	13.11	32.83	4.77	24.71	325.3	0.174
90	10.82	-	3.20	75	11.43	32.85	4.77	25.05	294.1	0.252
133	9.24	33.13	3.44	100	10.38	32.94	3.25	25.30	270.1	0.322
176	8.12	33.58	3.54	150	8.71	33.25	3.50	25.82	222.0	0.446
259	7.12	34.02	1.82	200	7.79	33.78	3.25	26.37	169.9	0.544
338	6.15	34.00	1.57	250	7.21	34.02	1.88	26.64	144.7	0.622
497	5.49	34.11	0.82	300	6.64	34.01	1.71	26.71	138.7	0.693
761	4.34	34.27	0.38	400	5.87	34.02	1.25	26.82	129.3	0.826
1049u	3.28	34.45	0.28	500	5.47	34.11	0.83	26.94	118.7	0.950
				600	5.00	34.19	0.59	27.06	108.1	1.064
				700	4.58	34.24	0.45	27.14	100.2	1.168
				800	4.18	34.30	0.36	27.23	92.1	1.264
				1000	3.45	34.42	0.28	27.40	76.5	1.433

a) Middle thermometer reading of 9.30° rejected.

E See footnote page 133.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

BLACK DOUGLAS; July 4, 1949; 2246 GCT; 39°48'N, 130°45'W; sounding, 2500 fm; wind, missing, force 2; weather, cloudy; sea, rough; wire angle, 7°. 408

0	15.10	32.81E	6.05	0	15.10	32.81	6.05	24.28	365.2	0.000	
10	14.62	32.81	4.20	10	14.62	32.81	4.20	24.39	355.5	0.036	
25	-	32.77	4.95	20	14.37	32.78	4.70	24.42	352.9	0.071	
50	13.91	32.86	4.70	30	14.27	32.77	4.94	24.43	351.9	0.107	
75	11.76	32.81	4.78	50	13.91	32.86	4.70	24.58	338.6	0.176	
99	10.53	-	-	75	11.76	32.81	4.78	24.96	302.7	0.256	
148	8.74	33.42	3.03	100	10.50	32.96	4.29	25.30	270.6	0.328	
197	7.84	33.86	3.13	150	8.66	33.44	3.03	25.97	207.1	0.447	
293	6.92	-	-	200	7.82	33.86	3.13	26.43	164.5	0.540	
387	5.75	34.00	1.20	250	7.38	33.90	2.78	26.52	156.0	0.620	
547p	4.89	34.25r	0.38r	300	6.86	33.94	2.15	26.63	146.7	0.696	
571	4.84	34.13	0.73	400	5.60	34.01	1.16	26.84	126.8	0.832	
858u	3.91	34.33	0.25	500	5.06	34.08	0.90	26.96	116.0	0.953	
				600	4.74	34.15	0.67	27.05	108.2	1.065	
				700	4.40	34.23	0.49	27.16	98.8	1.169	
				800	4.10	34.30	0.33	27.24	90.8	1.264	
				1000	(3.52)	(34.41)	-	(27.39)	(78.1)	(1.433)	

BLACK DOUGLAS; July 5, 1949; 0645 GCT; 39°38'N, 131°36'W; sounding, 2235 fm; wind, missing, force 4; weather, overcast; sea, rough; wire angle, 10°. 409

0	16.00	32.97E	5.24	0	16.00	32.97	5.24	24.21	372.4	0.000	
9	15.68	32.97	5.48	10	15.66	32.97	5.49	24.29	365.3	0.037	
23	-	32.97	5.73	20	15.61	32.97	5.72	24.30	364.6	0.073	
46	15.19	32.97	5.66	30	15.53	32.97	5.73	24.31	363.1	0.110	
67	12.22	32.86	6.11	50	14.15	32.96	5.66	24.60	336.0	0.180	
86	11.40	32.94	5.74	75	11.97	32.88	6.02	24.97	301.2	0.259	
125	10.11	32.97	5.71	100	11.00	32.95	5.73	25.20	279.6	0.332	
162	8.94	33.40	4.44	150	9.28	33.27	4.89	25.74	229.3	0.459	
237	7.63	33.89	4.18	200	8.16	33.70	4.34	26.25	181.2	0.562	
315	8.46r	33.96	3.18	250	7.48	33.91	4.09	26.52	156.7	0.646	
477	5.74	34.05	1.14	300	6.98	33.95	3.37	26.62	147.6	0.722	
737	4.30	34.27	0.34	400	6.24	34.00	1.94	26.75	135.6	0.863	
1012u	3.49	34.42	0.36	500	5.60	34.07	0.99	26.89	123.4	0.993	
				600	5.00	34.15	0.56	27.02	111.1	1.111	
				700	4.47	34.23	0.36	27.15	99.6	1.216	
				800	4.04	34.31	0.34	27.26	89.8	1.311	
				1000	3.50	34.42	0.35	27.40	77.2	1.478	

BLACK DOUGLAS; July 5, 1949; 1406 GCT; 39°29'N, 132°27'W; sounding, 2750 fm; wind, missing, force 1; weather, overcast; sea, moderate; wire angle, 0°. 410

0	15.99	33.04E	5.88	0	15.99	33.04	5.88	24.26	367.1	0.000	
10	15.72	33.04	5.43	10	15.72	33.04	5.43	24.33	361.4	0.036	
25	15.54	32.99	5.84	20	15.61	33.01	5.62	24.33	361.7	0.073	
50	12.86	32.94	6.13	30	15.37	32.98	5.93	24.36	358.9	0.109	
75	11.54	32.90	5.82	50	12.86	32.94	6.13	24.85	312.4	0.176	
100	11.34	32.97	6.90r	75	11.54	32.90	5.82	25.06	292.4	0.251	
149	9.70	33.24	5.08	100	11.34	32.97	5.46	25.16	284.1	0.323	
198	8.36	33.64	4.87	150	9.57	33.26	5.08	25.69	234.5	0.453	
297	7.17	33.93	3.81	200	8.35	33.67	4.86	26.20	186.2	0.558	
396	-	33.96	2.84	250	7.75	33.88	4.31	26.45	162.8	0.645	
593	4.68	34.09	0.96	300	7.15	33.93	3.79	26.58	151.2	0.723	
889	3.83	34.31	0.35	400	6.05	33.96	2.82	26.75	136.0	0.867	
1187	3.11	34.45	0.50	500	5.17	34.01	1.78	26.89	122.4	0.996	
				600	4.65	34.10	0.91	27.02	110.7	1.113	
				700	4.37	34.18	0.51	27.12	102.2	1.220	
				800	4.10	34.25	0.37	27.20	94.8	1.318	
				1000	3.57	34.37	0.36	27.35	81.7	1.495	

E See footnote page 133.

SIO

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

501 HORIZON; July 3, 1949; 0230 GCT; 38°50'N, 124°05'W; sounding, missing; wind, 315°, force 4; weather, overcast; sea, high; wire angle, 48°.

0	10.80	33.24	5.72	1.06	0	10.80	33.24	5.72	1.06	25.46	253.0	0.000
6	10.72	33.26	6.00	1.24	10	10.70	33.27	5.97	1.24	25.50	249.3	0.025
16	10.52	33.34	5.96	1.17	20	10.50	33.34	5.90	1.14	25.59	241.2	0.050
34	10.43	33.34	5.58	1.06	30	10.45	33.34	5.70	1.08	25.60	240.4	0.074
52	9.42	33.33	4.76	1.39	50	9.52	33.33	4.89	1.28	25.75	226.6	0.120
71	8.82	33.49	4.07	1.67	75	8.78	33.53	3.30	1.73	26.02	200.9	0.174
105	8.58	33.82	2.07	1.98	100	8.61	33.78	2.17	1.95	26.25	180.3	0.222
136	8.33	33.95	1.83	2.15	150	8.22	34.00	1.73	2.20	26.48	159.2	0.306
201	7.82	34.03	1.54	2.32	200	7.85	34.03	1.54	2.32	26.56	152.2	0.385
264	7.40	34.04	-	2.18	250	7.48	34.04	1.52	2.22	26.62	147.1	0.459
391	6.60	33.48r	1.63	1.95	300	7.17	34.04	1.59	2.09	26.66	143.5	0.532
581	5.42	34.22	0.48	2.76	400	6.53	34.08	1.63	1.96	26.78	133.4	0.670
930	4.26	34.38	0.25	2.51	500	5.89	34.16	1.08	2.35	26.93	120.2	0.797
					600	5.32	34.23	0.45	2.77	27.05	109.2	0.912
					700	4.93	34.28	0.35	2.73	27.13	101.6	1.017
					800	4.63	34.32	0.30	2.65	27.20	96.1	1.117
					1000	(4.03)	(34.42)	-	-	(27.34)	(83.3)	(1.296)

505 HORIZON; July 3, 1949; 1955 GCT; 38°06'N, 127°20'W; sounding, missing; wind, 310°, force 5; weather, cloudy; sea, high; wire angle, 38°.

0	13.52	32.95	5.97	0.62	0	13.52	32.95	5.97	0.62	24.72	323.2	0.000
7	13.70	32.88	5.97	0.48	10	13.70	32.89	5.96	0.47	24.64	331.3	0.033
19	13.69	32.94	5.89	0.50	20	13.68	32.94	5.90	0.50	24.68	327.4	0.066
39	12.55	32.94	6.00	0.62	30	13.58	32.94	5.94	0.55	24.70	325.9	0.098
60	10.19	33.35	5.55	0.94	50	10.90	33.15	5.88	0.73	25.38	262.3	0.157
96	8.68	33.39	3.78	1.47	75	9.38	33.37	4.68	1.14	25.80	222.0	0.218
203	7.43	33.96	1.97	2.02	100	8.69	33.40	3.65	1.48	25.94	209.5	0.272
326	6.15	33.98	1.36	2.42	150	8.11	33.70	2.50	1.79	26.26	179.9	0.369
410	5.58	33.98	0.99	2.59	200	7.46	33.95	2.00	2.01	26.55	152.6	0.452
495	5.11	34.07	0.49	2.63	250	6.86	33.98	1.70	2.18	26.66	143.2	0.526
756	4.18	34.25	0.40	2.70	300	6.36	33.98	1.47	2.34	26.72	137.2	0.596
1123	3.23	34.42	0.73	2.79	400	5.64	33.98	1.04	2.57	26.81	129.5	0.729
1414	2.74	34.43	0.92	2.80	500	5.10	34.07	0.47	2.64	26.95	117.2	0.853
					600	4.66	34.16	0.45	2.68	27.07	106.3	0.964
					700	4.34	34.22	0.42	2.69	27.15	99.1	1.067
					800	4.03	34.27	0.42	2.70	27.23	92.6	1.163
					1000	3.50	34.38	0.60	2.74	27.37	80.1	1.336

506 HORIZON; July 4, 1949; 0145 GCT; 37°55'N, 128°10'W; sounding, missing; wind, 300°, force 3; weather, overcast; sea, moderate; wire angle, 40°.

0	14.28	32.86	5.60	0.49	0	14.28	32.86	5.60	0.49	24.50	344.8	0.000
7	14.43	32.86	5.73	0.50	10	14.45	32.86	5.75	0.50	24.46	348.5	0.035
23	14.43	32.84	5.59	0.54	20	14.45	32.84	5.60	0.53	24.45	350.2	0.070
36	14.32	32.79	5.66	0.54	30	14.39	32.81	5.58	0.54	24.44	351.3	0.105
53	11.68	32.77	6.18	0.53	50	12.00	32.78	6.07	0.53	24.89	308.8	0.171
70	10.80	32.83	6.25	0.53	75	10.50	32.83	6.18	0.54	25.19	280.0	0.244
103	9.44	32.86	5.38	0.87	100	9.53	32.86	5.47	0.81	25.38	262.5	0.312
134	8.72	33.21	4.76	1.34	150	8.44	33.41	4.33	1.51	25.98	206.3	0.430
200	7.83	33.82	3.00	1.83	200	7.83	33.82	3.00	1.83	26.40	167.5	0.523
263	7.05	33.91	2.52	1.96	250	7.19	33.90	2.58	1.93	26.55	153.4	0.603
393	5.72	33.75r	2.40	-	300	6.60	33.92	2.48	2.06	26.65	144.7	0.678
589	4.87	34.13	0.54	2.68	400	5.68	33.93	2.40	2.34	26.77	133.6	0.816
951	3.68	34.42	0.40	2.75	500	5.18	34.00	1.43	2.56	26.88	123.3	0.945
					600	4.83	34.14	0.53	2.69	27.04	109.8	1.062
					700	4.48	34.25	0.40	2.73	27.16	98.4	1.165
					800	4.13	34.33	0.40	2.74	27.26	89.3	1.259
					1000	(3.51)	(34.43)	-	-	(27.40)	(76.6)	(1.426)

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	507
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	
HORIZON; July 4, 1949; 0800 GCT; 37°43'N, 128°58'W; sounding, missing; wind, 340°, force 3; weather, drizzle; sea, rough; wire angle, 41°.													
0	15.62	33.01	6.22	0.44	0	15.62	33.01	6.22	0.44	24.33	361.2	0.000	
8	15.80	33.01	5.70	0.50	10	15.81	33.01	5.70	0.50	24.28	365.5	0.036	
20	15.79	33.01	5.75	0.46	20	15.79	33.01	5.75	0.46	24.29	365.5	0.073	
38	15.80	33.01	6.11	0.43	30	15.78	33.01	5.90	0.44	24.29	365.4	0.110	
58	13.03	32.97	5.85	0.45	50	14.05	32.97	6.06	0.44	24.63	333.4	0.179	
76	11.88	33.00	5.45	0.44	75	11.90	33.00	5.47	0.44	25.08	291.2	0.258	
114	11.08	33.04	5.31	0.53	100	11.79	33.03	5.38	0.47	25.12	287.5	0.330	
151	9.20	33.26	4.75	1.18	150	9.25	33.22	4.77	1.18	25.71	232.5	0.459	
227	7.82	33.84	3.81	1.89	200	8.29	33.74	4.21	1.78	26.26	180.0	0.563	
303	6.72	33.93	2.49	1.91	250	7.48	33.88	3.27	1.91	26.49	158.9	0.648	
454	5.30	33.94	1.46	2.04	300	6.76	33.93	2.50	1.91	26.63	146.2	0.723	
689	4.32	34.20	0.43	2.71	400	5.67	33.94	1.85	1.96	26.78	132.9	0.863	
1074	3.49	34.42	0.84	2.79	500	5.05	33.96	1.14	2.18	26.87	124.7	0.992	
					600	4.62	34.07	0.62	2.52	27.00	112.7	1.111	
					700	4.28	34.21	0.43	2.72	27.15	99.1	1.217	
					800	4.02	34.28	0.50	2.79	27.23	91.8	1.312	
					1000	3.60	34.39	0.72	2.79	27.36	80.6	1.484	
HORIZON; July 4, 1949; 1403 GCT; 37°32'N, 129°47'W; sounding, missing; wind, 335°, force 3; weather, moderate rain showers; sea, moderate; wire angle, 24°.													508
0	15.84	33.12	5.59	0.46	0	15.84	33.12	5.59	0.46	24.36	357.9	0.000	
9	16.06	33.13	5.70	0.46	10	16.04	33.14	5.74	0.45	24.33	361.3	0.036	
22	16.06	33.10	6.05	0.44	20	16.06	33.11	6.01	0.44	24.30	364.0	0.072	
44	16.17	33.36	5.76	0.36	30	16.13	33.12	6.04	0.41	24.37	357.8	0.108	
66	12.25	32.94r	6.21	0.47	50	15.63	33.37	5.79	0.37	24.60	336.5	0.178	
87	12.44	33.19	5.90	0.39	75	12.27	33.25	6.16	0.47	25.20	279.5	0.255	
130	9.82	32.97	5.42	0.87	100	12.15	33.13	5.84	0.41	25.13	286.9	0.326	
172	8.61	33.46	4.28	1.38	150	9.07	33.04	4.95	1.13	25.60	242.8	0.458	
257	7.42	33.95	2.43	1.87	200	8.24	33.78	3.48	1.63	26.30	176.4	0.563	
343	6.31	33.94	2.49	1.97	250	7.57	33.94	2.48	1.86	26.53	155.8	0.646	
518	4.77	34.00	1.49	2.09	300	6.88	33.95	2.43	1.94	26.63	146.3	0.721	
787	4.07	34.29	0.32	2.72	400	5.64	33.95	2.26	2.00	26.79	131.6	0.860	
1197	3.10	34.45	0.62	2.73	500	4.89	33.99	1.63	2.06	26.91	120.6	0.986	
					600	4.56	34.07	0.95	2.29	27.01	111.9	1.102	
					700	4.31	34.19	0.49	2.55	27.13	101.0	1.209	
					800	4.05	34.30	0.33	2.73	27.25	90.7	1.305	
					1000	3.56	34.41	0.41	2.77	27.38	78.6	1.474	
HORIZON; July 4, 1949; 2030 GCT; 37°21'N, 130°36'W; sounding, missing; wind, 310°, force 3; weather, cloudy; sea, rough; wire angle, 33°.													509
0	16.22	33.17	5.16	0.53	0	16.22	33.17	5.16	0.53	24.31	362.4	0.000	
8	16.24	33.17	5.12	0.48	10	16.23	33.17	5.12	0.47	24.31	363.0	0.036	
20	16.17	33.15	5.58	0.46	20	16.17	33.15	5.58	0.46	24.31	363.5	0.073	
42	16.12	33.21	5.55	0.38	30	16.20	33.18	5.59	0.42	24.32	362.1	0.109	
62	13.38	33.10	5.05	0.43	50	15.50	33.19	5.40	0.39	24.49	346.9	0.180	
83	11.68	32.99	4.30	0.46	75	12.05	33.02	4.37	0.44	25.06	292.6	0.260	
123	11.05[a]	33.06	4.93	0.57	100	11.38	33.00	4.44	0.50	25.17	282.6	0.332	
160	10.10	33.28	4.52	0.95	150	10.37	33.20	4.63	0.81	25.51	251.7	0.465	
227	8.12	33.86	4.02	1.43	200	9.05	33.61	4.27	1.24	26.04	201.3	0.579	
286	6.84	33.95	2.52	2.02	250	7.44	33.91	3.53	1.65	26.52	156.2	0.668	
401u	5.14[b]	34.00	1.52	2.36	300	6.71	33.96	2.32	2.11	26.66	143.3	0.742	
592u	5.60r	33.96r	1.36r	2.30r	400	5.83	34.00	1.53	2.36	26.81	130.3	0.879	
958	3.59	34.40	0.62	2.70	500	5.25	34.06	1.24	2.45	26.92	119.7	1.004	
					600	4.81	34.14	1.05	2.52	27.04	109.7	1.119	
					700	4.42	34.23	0.90	2.58	27.15	99.1	1.223	
					800	4.07	34.31	0.78	2.64	27.25	90.1	1.318	
					1000	(3.49)	(34.41)	-	-	(27.39)	(77.7)	(1.486)	

a) Middle thermometer reading of 9.82° rejected.
b) This value and middle thermometer reading of 4.78° rejected.

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	µg at/L	m	°C	‰	ml/L	µg at/L	g/L	$10^5 cm^3/g$	dyn. m

510 HORIZON; July 5, 1949; 0227 GCT; 37°10'N, 131°25'W; sounding, missing; wind, 350°, force 3; weather, cloudy; sea, rough; wire angle, 26°.

0	16.29	32.97	5.61	0.52	0	16.29	32.97	5.61	0.52	24.14	378.6	0.000
9	16.33	32.97	5.92	0.48	10	16.34	32.96	5.93	0.48	24.12	380.7	0.038
22	16.11	32.94	5.77	0.48	20	16.18	32.94	5.84	0.48	24.15	378.8	0.076
44	15.56	32.90	6.46	0.42	30	15.97	32.92	5.84	0.46	24.18	376.2	0.114
66	11.77	32.86	6.35	-	50	14.45	32.89	6.50	0.42	24.49	347.3	0.187
88	10.51	32.84	5.97	0.59	75	11.07	32.85	6.23	0.52	25.11	288.0	0.266
134	9.94[a]	33.24	5.32	0.96	100	10.10	32.86	5.77	0.70	25.29	271.7	0.336
178	8.64	33.68	4.81	1.25	150	9.24	33.55	5.13	1.07	25.97	207.8	0.455
268	7.39	33.91	3.92	1.66	200	8.35	33.76	4.65	1.36	26.27	179.5	0.553
358	6.15	33.95	2.32	2.13	250	7.64	33.89	4.12	1.58	26.48	160.5	0.637
504	4.92[b]	33.99	1.65	2.21	300	6.94	33.93	3.37	1.83	26.61	148.5	0.715
814	3.99	34.31	0.34	2.79	400	5.75	33.96	2.10	2.18	26.79	132.3	0.855
1223	2.98	34.49	0.56	2.76	500	4.96	33.99	1.67	2.20	26.90	121.5	0.982
					600	4.55	34.08	1.18	2.38	27.02	111.0	1.098
					700	4.29	34.19	0.55	2.59	27.14	100.6	1.204
					800	4.02	34.30	0.34	2.78	27.25	90.3	1.299
					1000	3.41	34.41	0.38	2.79	27.40	76.8	1.466

605 HORIZON; July 7, 1949; 0026 GCT; 36°24'N, 126°17W; sounding, missing; wind, 340°, force 3; weather, cloudy; sea, rough; wire angle, 41°.

0	15.40	33.12	4.80	0.47	0	15.40	33.12	4.80	0.47	24.46	348.7	0.000
8	15.56	33.13	4.53	0.51	10	15.57	33.13	4.52	0.52	24.43	351.8	0.035
19	15.54	33.10	4.94	0.56	20	15.52	33.10	4.96	0.56	24.42	353.1	0.070
40	15.41	33.10	5.77	0.46	30	15.47	33.10	5.57	0.50	24.43	352.4	0.106
60	11.94	32.92	5.72	0.54	50	14.15	32.97	5.80	0.48	24.61	335.3	0.174
98	11.02	33.19	4.80	0.84	75	11.60	32.96	5.35	0.65	25.10	289.1	0.252
206	8.18	33.91	2.72	1.86	100	10.93	33.30	4.71	0.87	25.49	253.0	0.320
329	6.59	34.02	1.87	2.35	150	9.38	33.75	3.64	1.35	26.10	195.3	0.433
414	5.86	34.07	1.14	2.56	200	8.30	33.90	2.83	1.79	26.39	168.4	0.523
498	5.40	34.16	0.67	2.74	250	7.60	33.98	2.32	2.08	26.55	153.4	0.603
757	4.48	34.17r	0.86r	2.60r	300	6.97	34.00	2.04	2.27	26.66	143.9	0.678
1117	3.46	34.45	0.63	2.81	400	5.97	34.06	1.24	2.53	26.84	127.6	0.814
1401	2.91	34.51	1.02	2.74	500	5.39	34.16	0.67	2.74	26.99	114.0	0.935
					600	5.02	34.24	0.50	2.80	27.09	104.8	1.044
					700	4.68	34.30	0.48	2.84	27.18	97.1	1.145
					800	4.32	34.35	0.47	2.86	27.26	90.2	1.239
					1000	3.74	34.42	0.53	2.84	27.37	80.0	1.409

606 HORIZON; July 6, 1949; 1823 GCT; 36°11'N, 127°04'W; sounding, missing; wind, 350°, force 2; weather, overcast; sea, moderate; wire angle, 18°.

0	15.30	-	5.74	0.56	0	15.30	(32.97)	5.74	0.56	(24.36)	(357.5)	0.000
9	15.37	32.99	5.30	0.62	10	15.28	32.99	5.31	0.62	24.38	355.9	0.036
23	15.38	33.03	5.60	0.55	20	15.28	33.03	5.48	0.56	24.42	353.1	0.071
47	14.17	32.94	5.76	0.48	30	15.22	33.02	5.68	0.52	24.42	352.9	0.106
71	10.83	32.77	6.07	0.60	50	13.80	32.92	5.79	0.49	24.64	332.1	0.175
95	9.53	32.86	5.61	0.90	75	10.61	32.77	6.07	0.63	25.13	286.2	0.252
142	8.81	33.48	4.09	1.46	100	9.46	32.92	5.50	0.99	25.44	256.9	0.320
189	8.08	33.84	2.88	1.73	150	8.71	33.54	3.80	1.53	26.04	200.6	0.435
283	6.94	33.96	2.02	2.11	200	7.92	33.86	2.70	1.79	26.41	165.9	0.526
377	5.95	34.02	1.61	2.28	250	7.29	33.93	2.20	2.01	26.56	152.5	0.605
568	4.78	34.11	0.57	2.45	300	6.74	33.97	1.95	2.16	26.67	142.8	0.680
860	4.01	34.40	0.27	2.58	400	5.82	34.03	1.50	2.31	26.83	127.9	0.815
1280	3.02	34.51	0.63	2.64	500	5.12	34.07	0.85	2.40	26.95	117.5	0.938
					600	4.67	34.14	0.46	2.47	27.05	107.9	1.051
					700	4.38	34.23	0.34	2.52	27.16	98.7	1.153
					800	4.14	34.34	0.28	2.55	27.27	88.7	1.248
					1000	3.65	34.47	0.34	2.60	27.42	75.4	1.412

a) Middle thermometer reading of 9.82° rejected.
b) Middle thermometer reading of 4.78° rejected.

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

HORIZON; July 6, 1949; 1231 GCT; 35°58'N, 127°51'W; sounding, missing; wind, 335°, force 2; weather, overcast; sea, moderate; wire angle, 42°. 607

0	14.62	32.86	6.14	0.62	0	14.62	32.86	6.14	0.62	24.43	351.5	0.000
8	14.76	32.88	5.75	-	10	14.77	32.88	5.73	0.58	24.41	353.5	0.035
18	14.76	32.88	5.66	0.55	20	14.76	32.88	5.66	0.55	24.41	353.5	0.071
38	14.68	32.88	5.98	0.54	30	14.75	32.88	5.75	0.54	24.41	353.6	0.106
56	12.15	32.77	6.20	0.55	50	14.15	32.82	6.21	0.54	24.49	346.4	0.176
75	10.21	32.75	5.56	0.68	75	10.21	32.75	5.56	0.68	25.18	280.9	0.254
113	9.30	33.03	5.30	1.09	100	9.53	32.81	5.40	0.91	25.34	266.2	0.323
150	8.57	33.46	4.90	1.53	150	8.57	33.46	4.90	1.53	26.00	204.4	0.441
227	7.62	33.91	4.65	2.00	200	7.94	33.85	4.73	1.86	26.40	166.9	0.533
302	6.62	33.95	2.47	2.27	250	7.38	33.93	4.05	2.10	26.55	153.7	0.613
453	5.66	-	1.50	-	300	6.67	33.95	2.48	2.26	26.66	143.4	0.688
686	4.42	34.16u	0.64u	2.84u	400	6.03	34.00	1.83	2.49	26.78	132.7	0.825
1071	3.37	34.45	1.00	2.94	500	5.40	34.05	1.25	2.64	26.90	122.3	0.953
					600	4.85	34.11	0.83	2.77	27.01	112.4	1.070
					700	4.36	34.17	0.64	2.85	27.11	103.0	1.178
					800	4.03	34.24	0.68	2.89	27.20	94.8	1.277
					1000	3.53	34.39	0.87	2.94	27.37	79.7	1.452

HORIZON; July 6, 1949; 0607 GCT; 35°44'N, 128°37'W; sounding, missing; wind, 340°, force, missing; weather, cloudy; sea, rough; wire angle, 23°. 608

0	15.40	32.97	5.55	0.49	0	15.40	32.97	5.55	0.49	24.34	359.6	0.000
8	15.31	32.94	5.45	0.60	10	15.29	32.94	5.45	0.60	24.34	359.7	0.036
22	14.96	32.94	5.78	0.54	20	15.05	32.94	5.75	0.54	24.40	355.1	0.072
44	14.04	32.94	5.60	0.49	30	14.68	32.94	5.77	0.52	24.48	347.5	0.107
66	11.62	32.84	5.48	0.51	50	13.65	32.93	5.57	0.50	24.68	328.5	0.174
88	10.05	32.78	5.40	0.65	75	10.61	32.82	5.45	0.57	25.17	282.5	0.251
132	9.29	33.21	4.88	1.28	100	9.85	32.79	5.32	0.79	25.27	272.7	0.320
175	8.39	33.64	5.19	1.61	150	8.87	33.44	4.94	1.47	25.94	210.3	0.441
263	7.33	33.93	4.98	1.89	200	8.07	33.76	5.18	1.68	26.31	175.5	0.531
350	6.39	34.05	3.88	2.24	250	7.49	33.90	5.03	1.83	26.51	157.5	0.613
527	5.14	33.87r	3.74r	1.85r	300	6.88	33.99	4.76	2.08	26.66	143.3	0.689
795	4.08	34.36	0.68	2.67	400	5.98	34.10	2.50	2.33	26.87	124.8	0.822
1193	3.17	34.49	0.27	2.64	500	5.32	34.19	1.70	2.46	27.02	111.0	0.941
					600	4.80	34.26	1.20	2.55	27.14	100.7	1.047
					700	4.39	34.32	0.89	2.62	27.23	92.1	1.143
					800	4.07	34.36	0.68	2.66	27.29	86.5	1.232
					1000	3.55	34.44	0.43	2.67	27.41	76.2	1.395

HORIZON; July 6, 1949; 0022 GCT; 35°31'N, 129°24'W; sounding, missing; wind, 340°, force 3; weather, moderate rain showers; sea, moderate; wire angle, 36°. 609

0	15.86	32.99	5.31	0.52	0	15.86	32.99	5.31	0.52	24.26	367.7	0.000
8	15.94	32.99	5.65	0.48	10	15.94	32.98	5.64	0.47	24.23	370.8	0.037
20	15.82	32.95	5.33	0.47	20	15.82	32.95	5.33	0.47	24.23	370.5	0.074
39	14.87	32.86	5.38	0.49	30	15.08	32.87	5.35	0.48	24.33	361.2	0.111
59	13.02	33.12	4.97	0.43	50	13.15	32.97	5.27	0.46	24.81	315.8	0.178
79	13.15	33.39	4.93	0.48	75	13.16	33.38	4.94	0.47	25.13	286.6	0.254
119	11.82	33.28	5.10	0.54	100	12.84	33.34	5.00	0.52	25.16	283.9	0.325
158	9.54	33.33	4.86	1.10	150	9.93	33.31	4.94	0.99	25.67	236.5	0.455
234	8.04	33.87	3.70	1.56	200	8.58	33.76	4.40	1.40	26.24	182.8	0.560
307	6.95	33.96	3.14	1.80	250	7.82	33.89	3.73	1.62	26.45	163.2	0.646
456	5.32	33.51r	2.37	1.17r	300	7.10	33.95	3.18	1.79	26.60	149.2	0.724
697	4.45	34.27	0.74	2.70	400	5.72	34.05	2.65	2.07	26.86	125.4	0.861
1082	3.34	34.47	0.92	3.04	500	5.15	34.13	2.11	2.30	26.99	113.3	0.981
					600	4.80	34.20	1.18	2.52	27.09	105.1	1.090
					700	4.45	34.27	0.74	2.70	27.18	96.5	1.191
					800	4.12	34.33	0.74	2.84	27.26	89.3	1.284
					1000	3.55	34.43	0.84	2.98	27.40	77.0	1.451

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

610 HORIZON; July 5, 1949; 1744, 1435 GCT; 35°18'N, 130°11'W; sounding, missing; wind, 320°, force 3; weather, cloudy; sea, rough; wire angle, 32°, 32°.

0	16.28	33.23	4.88	0.47	0	16.28	33.23	4.88	0.47	24.34	359.5	0.000
8	16.48	33.26	4.80	0.40	10	16.48	33.26	4.80	0.40	24.32	361.9	0.036
20	16.46	32.90	5.18	0.41	20	16.46	32.90	5.18	0.41	24.05	388.0	0.074
43	16.54	33.40	4.95	0.36	30	16.46	33.29	5.20	0.38	24.35	360.0	0.111
62	13.80	33.37	5.17	0.43	50	16.46	33.40	4.96	0.38	24.43	352.4	0.182
83	13.25	33.37	5.19	0.39	75	13.55	33.37	5.20	0.40	25.04	294.9	0.263
55p	16.38	33.24r	4.64r	0.34r	100	13.19	33.39	5.15	0.43	25.13	287.1	0.336
80p	13.46r	33.37r	5.35r	0.34r	150	11.52	33.49	4.80	0.63	25.53	250.2	0.470
147p	11.62	33.48	4.82	0.61	200	9.24	33.80	4.19	1.18	26.16	190.1	0.581
219p	8.80	33.82	3.90	1.29	250	8.36	33.86	3.49	1.44	26.35	173.1	0.671
364p	7.10	33.64r	4.10r	1.28r	300	7.75	33.92	2.80	1.68	26.48	160.7	0.754
579p	5.23	34.18	0.48	2.61	400	6.73	34.02	1.60	2.10	26.71	140.6	0.905
894p	4.06	34.36	0.26	2.72	500	5.86	34.11	0.84	2.43	26.89	123.7	1.037
					600	5.10	34.20	0.44	2.64	27.05	108.6	1.154
1026	3.80	34.43	0.30	2.89	700	4.60	34.27	0.36	2.68	27.16	98.3	1.257
1467	2.85	34.45	0.95	2.76	800	4.31	34.32	0.30	2.69	27.23	92.5	1.352
1916	2.16	34.09r	1.23	2.44	1000	3.84	34.42	0.27	2.86	27.36	81.2	1.526
2365	1.85	34.61	1.97	2.45	1200	3.39	34.45	0.47	2.89	27.43	75.1	1.682
2815	1.66	34.63	2.31	2.43	1500	2.78	34.47	0.99	2.74	27.51	68.4	1.899
					2000	2.10	34.57	1.31	2.44	27.64	55.5	2.207
					2500	1.79	34.62	2.13	2.44	27.71	49.7	2.472

701 HORIZON; July 9, 1949; 1255 GCT; 35°41'N, 121°50'W; sounding, missing; wind, 315°, force 4; weather, overcast; sea, high; wire angle, 55°.

0	14.10	33.26	4.87	0.50	0	14.10	33.26	4.87	0.50	24.84	312.0	0.000
6	14.19	33.28	4.91	0.47	10	14.21	33.28	5.25	0.47	24.84	312.8	0.031
15	14.18	33.19	5.94	0.47	20	14.15	33.12	5.73	0.50	24.73	323.6	0.063
30	11.56	33.08	5.29	0.67	30	11.56	33.08	5.29	0.67	25.20	278.5	0.093
45	10.63	33.19	5.04	0.99	50	10.54	33.30	5.00	1.03	25.55	245.1	0.146
59	10.26	33.37	4.88	1.13	75	9.48	33.45	4.50	1.27	25.85	217.7	0.203
83	9.21	33.48	4.06	1.38	100	8.92	33.53	3.49	1.59	26.00	203.6	0.256
108	8.77	33.55	3.29	1.67	150	8.21	33.79	2.50	1.84	26.31	174.5	0.351
160	8.08	33.87	2.36	1.87	200	7.71	34.05	2.15	1.95	26.59	148.9	0.432
215	7.58	34.07	-	-	250	7.30	34.06	2.04	2.02	26.66	143.2	0.505
330	6.75	34.04u	1.73u	2.20u	300	6.94	34.04	1.88	2.12	26.69	140.6	0.575
547	5.42	34.23	0.59	2.84	400	6.25	34.09	1.24	2.42	26.82	129.0	0.710
					500	5.68	34.20	0.76	2.73	26.98	114.5	0.832

702 HORIZON; July 9, 1949; 1848 GCT; 35°25'N, 122°35'W; sounding, missing; wind, 320°, force 4; weather, fog at distance; sea, high; wire angle, 47°.

0	14.15	33.17	5.06	0.55	0	14.15	33.17	5.06	0.55	24.76	319.5	0.000
7	14.36	33.22	4.92	0.47	10	14.36	33.22	4.88	0.46	24.76	320.1	0.032
18	14.34	33.17	4.98	0.44	20	14.34	33.17	5.00	0.44	24.72	323.7	0.064
34	14.23	33.21	5.40	0.46	30	14.25	33.21	5.35	0.45	24.77	319.2	0.096
50	13.91	33.19	5.16	0.53	50	13.91	33.19	5.16	0.53	24.83	314.5	0.160
75	10.56	33.22	4.84	1.35	75	10.56	33.22	4.84	1.35	25.49	252.0	0.230
153	8.50	33.75	3.04	1.82	100	9.53	33.27	4.23	1.57	25.70	232.2	0.291
243	7.70	34.00	2.24	2.05	150	8.54	33.67	3.13	1.80	26.17	188.3	0.396
304	6.93	33.97	2.10	2.12	200	8.11	33.94	2.54	1.92	26.44	163.0	0.484
365	6.48	34.07	1.20	2.55	250	7.57	34.01	2.20	2.07	26.58	150.6	0.563
546	5.44	34.04r	1.40r	2.46r	300	6.95	33.97	2.11	2.10	26.64	145.7	0.636
794	4.40	34.33	0.51	2.78	400	6.22	34.10	1.01	2.58	26.84	127.8	0.773
1046	3.76	34.43	0.74	2.81	500	5.66	34.16	0.80	2.67	26.95	117.4	0.896
					600	5.16	34.23	0.64	2.72	27.07	107.2	1.008
					700	4.73	34.28	0.55	2.74	27.16	99.1	1.111
					800	4.40	34.34	0.52	2.78	27.23	91.8	1.207
					1000	3.87	34.42	0.69	2.80	27.36	81.5	1.380

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	µg at/L	m	°C	‰	ml/L	µg at/L	g/L	$10^5 cm^3/g$	dyn. m	
HORIZON; July 13, 1949; 2248 GCT; 33°19'N, 120°45'W; sounding, missing; wind, 315°, force 2; weather, cloudy; sea, rough; wire angle, 14°.													801
0	16.19	33.44	3.64	0.46	0	16.19	33.44	3.64	0.46	24.53	342.1	0.000	
10	16.15	33.38	3.73	0.42	10	16.15	33.38	3.73	0.42	24.49	346.0	0.034	
24	15.54	33.31	3.66	0.47	20	15.76	33.33	3.70	0.45	24.54	341.4	0.069	
48	13.67	33.24	3.93	0.57	30	15.15	33.29	3.70	0.49	24.64	331.8	0.102	
71	11.36	33.42	4.50	1.19	50	13.35	33.24	4.00	0.58	24.98	300.0	0.166	
95	10.36	33.48	3.47	1.40	75	11.27	33.44	4.35	1.22	25.53	247.8	0.234	
142	8.74	33.77	2.47	1.92	100	10.18	33.50	3.30	1.48	25.77	225.5	0.293	
190	8.12	33.95	1.89	1.95	150	8.62	33.83	2.30	1.92	26.28	178.0	0.394	
285	6.96	33.99	1.70	2.28	200	8.02	33.96	1.88	1.96	26.48	160.1	0.478	
381	6.10	-	1.10	2.61	250	7.41	33.98	1.80	2.12	26.58	150.7	0.557	
575	5.44	34.27	0.32	2.86	300	6.83	33.99	1.64	2.34	26.67	142.5	0.630	
869	4.24	34.40	0.40	2.94	400	6.03	34.07	0.99	2.66	26.83	127.8	0.765	
1288	3.24	34.52	1.05	2.61	500	5.69	34.21	0.51	2.81	26.98	113.8	0.886	
					600	5.33	34.28	0.32	2.87	27.09	105.9	0.995	
					700	4.90	34.33	0.32	2.92	27.18	97.5	1.097	
					800	4.51	34.38	0.33	2.93	27.26	90.3	1.191	
					1000	3.82	34.45	0.59	2.90	27.39	78.8	1.360	
HORIZON; July 13, 1949; 1450, 1537 GCT; 33°09'N, 121°20'W; sounding, missing; wind, 320°, force 1; weather, overcast; sea, moderate; wire angle, 16°, 10°.													802
0	15.85	33.55	4.42	0.49	0	15.85	33.55	4.42	0.49	24.69	326.8	0.000	
10	15.90	33.55	4.60	0.43	10	15.90	33.55	4.60	0.43	24.68	328.1	0.033	
25	15.71	33.46	4.63	0.47	20	15.82	33.47	4.60	0.44	24.63	332.4	0.066	
50	12.34	33.57	4.17	1.21	30	15.27	33.46	4.57	0.48	24.75	321.7	0.098	
75	9.98	33.69	3.28	1.81	50	12.34	33.57	4.17	1.21	25.44	256.1	0.156	
98	9.12	33.86	2.40	1.92	75	9.98	33.69	3.28	1.81	25.96	207.6	0.214	
					100	9.12	33.86	2.40	1.92	26.23	184.1	0.263	
147	8.22	33.93	2.37	1.88	150	8.20	33.94	2.37	1.88	26.43	163.3	0.350	
195	7.72	34.02	1.49	2.09	200	7.64	34.02	1.44	2.12	26.58	150.0	0.429	
293	6.76	34.11	1.25	1.20r	250	7.14	34.07	1.30	2.26	26.69	140.3	0.501	
391	6.16	34.33r	0.66r	1.30r	300	6.73	34.11	1.24	2.32	26.78	132.5	0.569	
587	5.20	34.22	0.93	2.50	400	6.13	34.16	1.11	2.39	26.90	122.2	0.696	
884	4.20	34.43	0.54	2.66	500	5.59	34.20	1.02	2.44	26.99	113.7	0.804	
1183	3.42	34.52	0.78	2.77	600	5.16	34.23	0.90	2.51	27.07	107.2	0.915	
					700	4.77	34.29	0.76	2.57	27.16	98.9	1.017	
					800	4.43	34.38	0.64	2.63	27.27	89.3	1.113	
					1000	3.81	34.48	0.58	2.72	27.41	76.5	1.278	
HORIZON; July 13, 1949; 0823, 0850 GCT; 33°15'N, 122°05'W; sounding, missing; wind, 180°, force 2; weather, overcast; sea, rough; wire angle, 15°, 15°.													803
0	15.27	33.22	4.22	0.52	0	15.27	33.22	4.22	0.52	24.56	338.7	0.000	
10	15.45	33.21	4.12	0.49	10	15.45	33.21	4.12	0.49	24.52	343.3	0.034	
23	15.05	33.28	4.64	0.43	20	15.24	33.26	4.60	0.44	24.60	335.6	0.068	
47	13.88	33.40	4.52	0.70	30	14.91	33.34	4.68	0.43	24.73	323.3	0.101	
71	12.71	33.28	4.40	0.81	50	13.80	33.40	4.50	0.71	25.01	296.8	0.163	
					75	12.45	33.27	4.43	0.83	25.18	281.5	0.235	
94	10.80	33.22	4.46	0.99	100	10.57	33.23	4.44	1.04	25.49	252.7	0.302	
142	9.27	33.64	4.07	1.59	150	9.13	33.72	3.97	1.63	26.12	193.5	0.414	
189	8.42	33.91	3.30	1.83	200	8.29	33.93	3.02	1.90	26.41	166.2	0.504	
282	7.26	34.00	1.78	2.28	250	7.68	33.98	2.13	2.16	26.49	154.2	0.583	
377	5.86[a]	34.16	1.49	2.46	300	7.02	34.01	1.70	2.33	26.66	143.7	0.658	
570	5.41	34.18	0.79	2.51	400	5.83	34.16	1.37	2.47	26.93	118.5	0.789	
863	4.24	34.38	0.39	2.60	500	5.64	34.17	1.00	2.50	26.96	116.3	0.907	
1282	3.17	34.52	1.10	2.69	600	5.30	34.19	0.73	2.52	27.02	112.2	1.021	
					700	4.87	34.24	0.54	2.55	27.11	103.6	1.129	
					800	4.46	34.32	0.43	2.58	27.22	94.4	1.228	
					1000	3.76	34.45	0.55	2.64	27.39	78.0	1.400	

a) Middle thermometer reading of 6.69° rejected.

SIO

CCOFI
4907

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	µg at/L	m	°C	‰	ml/L	µg at/L	g/L	$10^5 cm^3/g$	dyn. m
804	HORIZON; July 13, 1949; 0236 GCT; 32°57'N, 122°47'W; sounding, missing; wind, 145°, force 2; weather, overcast; sea, rough; wire angle, 20°.											
0	15.50	33.31	3.31	0.57	0	15.50	33.31	3.31	0.57	24.58	336.7	0.000
9	15.50	33.24	3.59	0.43	10	15.49	33.24	3.59	0.44	24.53	341.9	0.034
23	15.35	33.26	3.56	0.48	20	15.38	33.25	3.57	0.45	24.56	339.4	0.068
46	12.75	33.22	3.84	0.53	30	14.49	33.25	3.60	0.49	24.75	321.3	0.101
70	11.40	33.18	3.57	0.71	50	12.40	33.21	3.85	0.56	25.14	284.5	0.162
94	9.96	33.42	3.92	1.24	75	11.10	33.20	3.61	0.75	25.38	262.6	0.230
140	8.87	33.75	3.22	1.73	100	9.73	33.48	3.93	1.30	25.83	219.8	0.290
186	8.55	34.02	1.71	1.97	150	8.82	33.81	2.80	1.79	26.24	182.0	0.391
277	7.34	34.16	1.48	2.20	200	8.43	34.06	1.67	1.99	26.49	158.6	0.476
367	5.87	34.14	1.28	2.43	250	7.78	34.14	1.53	2.13	26.65	143.7	0.552
550	5.00	34.18	0.85	2.58	300	6.90	34.16	1.43	2.26	26.79	130.8	0.620
837	4.14	34.54r	0.46	2.69	400	5.68	34.14	1.20	2.48	26.93	118.0	0.744
1256	3.24	34.54	0.86	2.95	500	5.20	34.16	0.97	2.56	27.01	111.6	0.859
					600	4.85	34.21[a]	0.76	2.61	27.09	105.0	0.967
					700	4.54	34.29	0.59	2.65	27.19	96.1	1.068
					800	4.24	34.36	0.47	2.68	27.27	88.4	1.160
					1000	3.70	34.47	0.50	2.77	27.42	76.0	1.325
805	HORIZON; July 12, 1949; 2055 GCT; 32°40'N, 123°30'W; sounding, missing; wind, 185°, force 2; weather, cloudy; sea, moderate; wire angle, 30°.											
0	15.29	33.21	3.48	0.50	0	15.29	33.21	3.48	0.50	24.55	339.8	0.000
8	15.30	33.15	3.84	0.45	10	15.28	33.15	3.84	0.45	24.51	344.3	0.034
21	15.16	33.15	3.56	0.44	20	15.18	33.15	3.56	0.45	24.53	342.5	0.068
43	13.62	33.31	4.18	0.34	30	15.08	33.19	3.56	0.40	24.58	337.7	0.103
65	13.68	33.49	4.49	0.37	50	13.60	33.39	4.35	0.35	25.05	293.8	0.166
86	12.06	33.31	4.64	0.63	75	13.62	33.43	4.60	0.45	25.07	291.8	0.239
130	9.59	33.48	4.02	1.35	100	10.63	33.34	4.56	0.83	25.57	244.6	0.306
173	8.82	33.89	2.03	1.95	150	9.20	33.70	2.90	1.80	26.09	196.1	0.416
260	7.54	34.02	1.57	2.14	200	8.37	33.96	1.90	2.03	26.42	165.1	0.506
348	6.41	34.05	1.19	2.23	250	7.68	34.01	1.62	2.13	26.56	152.0	0.585
526	5.40	34.16	0.61	2.56	300	7.00	34.03	1.38	2.18	26.68	142.0	0.659
799	4.36	34.38	0.41	2.67	400	6.07	34.08	1.00	2.30	26.84	127.6	0.794
1082	3.62	34.49	0.69	2.64	500	5.52	34.14	0.70	2.51	26.95	117.4	0.917
					600	5.05	34.23	0.51	2.63	27.08	106.0	1.029
					700	4.69	34.31	0.43	2.66	27.19	96.4	1.130
					800	4.36	34.39	0.43	2.67	27.28	87.6	1.222
					1000	3.83	34.46	0.55	2.65	27.39	78.3	1.387
806	HORIZON; July 12, 1949; 1456 GCT; 32°22'N, 124°13'W; sounding, missing; wind, 355°, force 2; weather, overcast; sea, high; wire angle, 15°.											
0	16.00	33.22	3.08	0.48	0	16.00	33.22	3.08	0.48	24.40	354.2	0.000
10	15.77	33.17	3.06	0.42	10	15.77	33.17	3.06	0.42	24.41	353.1	0.035
24	15.77	33.17	3.44	0.45	20	15.77	33.17	3.40	0.43	24.41	353.4	0.071
48	15.79	33.19	3.65	0.50	30	15.78	33.18	3.54	0.47	24.42	353.1	0.106
71	15.29	33.60	3.68	0.36	50	15.76	33.20	3.64	0.50	24.44	351.6	0.176
94	14.51	33.71	3.62	0.32	75	15.24	33.63	3.65	0.35	24.88	310.2	0.259
138	11.66	33.49	3.29	0.87	100	14.25	33.70	3.61	0.33	25.15	285.4	0.334
183	8.84	33.77	2.77	1.66	150	10.56	33.53	3.15	1.14	25.73	230.7	0.462
280	7.59[b]	34.07	1.72	2.24	200	8.52	33.85	2.59	1.84	26.31	175.6	0.565
376	6.78	34.16	-	-	250	7.84	34.01	2.03	2.14	26.54	154.4	0.647
572	5.69	34.31	0.35	2.65	300	7.37	34.09	1.57	2.30	26.67	142.6	0.720
868	4.49	34.42	0.52	2.64	400	6.65	34.18	0.93	2.49	26.84	127.7	0.856
1293	3.29	33.61r	3.99r	0.93r	500	6.06	34.26	0.54	2.61	26.98	115.3	0.977
					600	5.57	34.32	0.34	2.66	27.09	105.9	1.088
					700	5.13	34.37	0.35	2.68	27.18	97.7	1.190
					800	4.73	34.40	0.44	2.66	27.25	91.5	1.284
					1000	4.02	(34.49)	-	-	(27.40)	(78.3)	(1.454)

a) Salinity curve interpolated from 550 meters to 1256 meters; based on adjacent stations and previous cruise.
b) Middle thermometer reading of 7.76° rejected.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	
HORIZON; July 12, 1949; 0840 GCT; 32°05'N, 124°55'W; sounding, missing; wind, 350°, force 3; weather, overcast; sea, rough; wire angle, 24°.													807
0	16.40	33.35	5.39u	0.63	0	16.40	33.35	5.39	0.63	24.41	353.3	0.000	
9	16.57	33.31	5.79	0.61	10	16.59	33.31	5.80	0.61	24.33	360.6	0.036	
22	16.59	33.30	4.90	0.59	20	16.61	33.30	4.88	0.60	24.32	361.9	0.072	
46	16.58	33.29	5.24	0.56	30	16.62	33.30	4.95	0.58	24.32	362.4	0.108	
68	13.67	33.19	5.64	0.61	50	15.74	33.28	5.33	0.56	24.50	345.5	0.179	
110	12.42	33.25	5.39	0.74	75	13.49	33.19	5.65	0.63	24.92	306.7	0.260	
228	8.43	33.95	5.03	2.06	100	12.81	33.21	5.49	0.69	25.06	292.9	0.335	
364	7.27	34.13	4.50	2.73	150	10.00	33.58	5.23	1.00	25.86	217.8	0.463	
454	6.61	34.24	4.01	2.87	200	8.77	33.88	5.10	1.76	26.30	177.0	0.562	
544	6.00	34.23	3.30	3.04	250	8.22	33.99	4.95	2.22	26.47	161.4	0.646	
821	4.66	34.37	2.43	3.10	300	7.76	34.06	4.75	2.51	26.59	150.3	0.724	
1203	3.54	34.47	1.03	2.94	400	6.98	34.18	4.32	2.78	26.80	132.0	0.865	
1499	2.93	34.52	1.30	2.84	500	6.29	34.23	3.63	2.97	26.93	120.3	0.991	
					600	5.66	34.25	3.09	3.09	27.03	112.0	1.107	
					700	5.15	34.31	2.75	3.12	27.13	102.4	1.215	
					800	4.74	34.36	2.50	3.10	27.22	94.5	1.313	
					1000	4.06	34.44	1.77	3.03	27.36	82.2	1.490	
HORIZON; July 12, 1949; 0140 GCT; 31°47'N, 125°38'W; sounding, missing; wind, 360°, force 5; weather, overcast; sea, very high; wire angle, 53°.													808
0	16.80	33.30	4.79	0.48	0	16.80	33.30	4.79	0.48	24.28	365.7	0.000	
7	16.62	33.31	4.82	0.42	10	16.62	33.31	4.85	0.42	24.33	361.2	0.036	
16	16.64	33.31	4.84	0.45	20	16.63	33.31	4.88	0.46	24.33	361.6	0.072	
32	16.63	33.40	4.91	0.56	30	16.63	33.40	4.93	0.56	24.39	355.4	0.108	
49	15.79	33.26	5.18	0.48	50	15.50	33.26	5.19	0.47	24.54	341.8	0.178	
79	14.26	33.57	5.02	0.30	75	14.31	33.57	5.08	0.31	25.04	295.2	0.258	
165	9.53	33.55	3.34	1.58	100	13.43	33.57	4.75	0.32	25.22	278.3	0.329	
267	8.16	34.05	3.15	2.09	150	10.00	33.56	3.50	1.39	25.85	219.0	0.453	
332	7.82	34.05	1.83	2.27	200	8.82	33.70	3.25	1.84	26.15	191.2	0.557	
399	6.88	-	-	-	250	8.28	34.02	3.20	2.05	26.48	160.4	0.644	
598	5.56	34.25	0.39	2.91	300	7.98	34.05	2.55	2.18	26.55	154.4	0.722	
926	4.48[a]	34.45	0.60	2.72	400	6.80	34.09	1.23	2.45	26.75	136.4	0.868	
1180	3.54[b]	34.43r	0.94	2.70	500	6.06	34.16	0.65	2.74	26.91	122.4	0.997	
					600	5.57	34.25	0.40	2.92	27.03	110.9	1.114	
					700	5.23	34.36	0.42	2.90	27.16	99.5	1.219	
					800	4.90	34.41	0.46	2.82	27.24	92.8	1.315	
					1000	4.19	(34.47)	0.70	2.70	(27.37)	(81.7)	(1.490)	
HORIZON; July 11, 1949; 1754 GCT; 31°29'N, 126°20'W; sounding, missing; wind, 345°, force 4; weather, cloudy; sea, high; wire angle, 40°.													809
0	16.54	33.28	4.92	0.49	0	16.54	33.28	4.92	0.49	24.32	361.4	0.000	
8	16.72	33.22	5.16	0.49	10	16.72	33.22	5.17	0.48	24.23	370.2	0.037	
18	16.72	33.22	5.24	0.48	20	16.72	33.22	5.25	0.47	24.24	370.2	0.074	
32	16.70	33.22	5.39	0.44	30	16.70	33.22	5.35	0.45	24.24	370.1	0.111	
46	16.26	33.58	5.35	0.47	50	15.50	33.58	5.35	0.46	24.79	318.3	0.179	
59	14.44	33.44	5.68	0.46	75	14.27	33.46	5.73	0.39	24.96	302.5	0.257	
88	14.03	33.55	5.74	0.34	100	13.74	33.55	5.66	0.36	25.14	286.2	0.331	
116	12.89	33.55	4.90	0.65	150	9.75	33.57	4.37	1.29	25.90	214.4	0.455	
174	9.26	33.60	4.10	1.47	200	8.96	33.72	3.67	1.65	26.14	192.0	0.558	
230	8.62	33.93	3.01	1.85	250	8.37	33.97	2.70	1.99	26.44	165.3	0.647	
345	7.21	33.46r	5.05r	2.41	300	7.76	34.01	1.20	2.24	26.55	154.0	0.726	
527	5.13	34.07	1.18	2.63	400	6.56	34.03	1.63	2.51	26.74	137.6	0.872	
909	3.94	34.38	0.54	2.86	500	5.39	34.06	1.25	2.61	26.91	121.5	1.002	
					600	4.75	34.12	1.01	2.70	27.03	110.5	1.118	
					700	4.42	34.21	0.84	2.76	27.14	100.5	1.223	
					800	4.17	34.30	0.68	2.82	27.24	91.9	1.319	
					1000	(3.77)	(34.42)	-	-	(27.37)	(80.4)	(1.492)	

a) Middle thermometer reading of 4.92° rejected.
b) Left thermometer reading of 3.36° rejected.

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
810	HORIZON; July 11, 1949; 1127 GCT; 31°11'N, 127°03'W; sounding, missing; wind, 340°, force 4; weather, overcast; sea, high; wire angle, 27°.											
0	17.60	33.68	4.89	0.56	0	17.60	33.68	4.89	0.56	24.38	356.1	0.000
17	17.78	33.66	4.87	0.46	10	17.78	33.67	4.88	0.50	24.33	361.2	0.036
30	17.78	33.71	4.93	0.59	20	17.80	33.67	4.90	0.46	24.32	361.8	0.072
53	15.87	33.68	5.25	0.64	30	17.78	33.71	4.93	0.59	24.36	359.1	0.108
75	15.59	33.75	4.69	-	50	15.98	33.68	5.22	0.63	24.76	321.6	0.176
113	14.76	33.80	4.41	1.37	75	15.59	33.75	4.69	0.82	24.90	308.9	0.255
228	9.09	33.77	3.96	1.51	100	15.06	33.79	4.53	1.27	25.05	295.1	0.330
357	7.10	34.00	3.61	2.01	150	12.72	33.80	4.23	1.42	25.54	249.2	0.466
443	6.27	34.05	2.41	2.44	200	9.75	33.77	4.05	1.46	26.05	200.6	0.580
530	5.67	34.20	0.72	2.57	250	8.64	33.79	3.94	1.56	26.25	182.7	0.675
799	4.60	34.24r	0.67	2.72	300	7.86	33.87	3.81	1.75	26.43	165.8	0.762
1175	3.54	34.49	0.77	2.77	400	6.65	34.03	3.18	2.25	26.73	138.7	0.914
1472	2.93	34.45r	1.60	2.66	500	5.87	34.16	0.93	2.54	26.93	119.8	1.044
					600	5.30	34.26	0.69	2.63	27.08	106.8	1.157
					700	4.91	34.32	0.68	2.68	27.17	98.5	1.260
					800	4.58	34.36	0.67	2.72	27.24	92.4	1.355
					1000	3.97	34.44	0.71	2.76	27.37	81.2	1.528
901	CREST; July 1, 1949; 0716 GCT; 32°39'N, 118°09'W; sounding, missing; wind, 280°, force 2; weather, overcast; sea, moderate; wire angle, 2°.											
0	18.3	33.66	5.54		0	18.3	33.66	5.54		24.19	374.2	0.000
10	18.25	33.66	5.50		10	18.25	33.66	5.50		24.21	372.9	0.037
25	15.49	33.44	6.38		20	16.50	33.45	6.32		24.46	348.8	0.073
50	11.98	33.46	5.10		30	14.07	33.44	6.38		24.99	299.0	0.106
75	10.58	33.58	3.64		50	11.98	33.46	5.10		25.42	258.3	0.162
100	-	33.75	2.79		75	10.58	33.58	3.64		25.78	224.4	0.222
150	9.32	33.91	2.56		100	9.97	33.75	2.79		26.00	203.6	0.275
200	8.76	34.04	1.88		150	9.32	33.91	2.56		26.24	182.3	0.372
299	7.62	34.18	1.31		200	8.76	34.04	1.88		26.43	165.0	0.458
398	7.28	34.33	0.57		250	8.13	34.12	1.60		26.58	150.6	0.538
697	5.16	34.36	0.47		300	7.62	34.18	1.30		26.71	139.6	0.610
896	4.43	34.38	0.50		400	7.25	34.33	0.56		26.88	124.8	0.742
1196	3.60	34.52	0.81		500	6.50	34.34	0.48		26.99	115.1	0.862
					600	5.71	34.35	0.47		27.10	105.4	0.972
					700	5.15	34.36	0.47		27.17	98.4	1.074
					800	4.75	34.37	0.46		27.23	93.8	1.170
					1000	4.10	34.44	0.59		27.35	82.7	1.347
902	CREST; July 1, 1949; 1350 GCT; 32°22'N, 118°51'W; sounding, missing; wind, 270°, force 2; weather, cloudy; sea, moderate; wire angle, 0°.											
0	16.8	33.57	5.63	0.40	0	16.8	33.57	5.63	0.40	24.48	346.7	0.000
10	16.63	33.55	5.61	0.26	10	16.63	33.55	5.61	0.26	24.51	343.9	0.035
25	15.65	33.46	5.81	0.22	20	15.92	33.48	5.73	0.23	24.62	333.9	0.068
49	11.82	33.40	5.58	0.72	30	15.07	33.44	5.81	0.22	24.78	319.3	0.101
73	10.18	33.55	3.86	0.87	50	11.81	33.40	5.54	0.73	25.40	259.9	0.159
98	-	33.80	2.88	1.48	75	10.10	33.56	3.62	0.88	25.83	219.4	0.219
147	8.66	34.09	2.20	2.00	100	9.40	33.81	2.82	1.50	26.14	190.2	0.270
196	8.22	34.09	1.75	2.29	150	8.66	34.09	2.19	2.01	26.48	159.0	0.357
295	7.25	34.14	0.96	-	200	8.17	34.10	1.70	2.29	26.56	151.7	0.435
393	6.67	34.22	0.71	2.81	250	7.66	34.11	1.29	2.47	26.65	144.5	0.509
					300	7.22	34.14	0.94	2.61	26.73	136.8	0.579
					400	(6.64)	(34.23)	(0.70)	(2.82)	(26.88)	(122.8)	(0.709)

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	
CREST; July 1, 1949; 1914 GCT; 32°03'N, 119°32'W; sounding, missing; wind, 290°, force 2; weather, cloudy; sea, moderate; wire angle, 0°.													903
0	15.0	33.55	5.81	0.70	0	15.0	33.55	5.81	0.70	24.88	308.5	0.000	
10	14.97	33.48	5.88	0.70	10	14.97	33.48	5.88	0.70	24.83	313.7	0.031	
25	14.92	33.51	5.81	0.72	20	14.95	33.51	5.86	0.70	24.86	311.3	0.062	
49	12.30	33.39	5.48	0.94	30	14.14	33.50	5.77	0.74	25.02	296.0	0.093	
73	10.96	33.46	4.85	1.27	50	12.25	33.39	5.47	0.97	25.31	268.3	0.149	
96	-	33.55	3.78	1.64	75	10.75	33.46	4.80	1.30	25.64	237.5	0.212	
140	8.68	-	2.64	2.19	100	9.64	33.58	3.66	1.71	25.92	210.9	0.268	
183	8.12	34.02	2.14	2.31	150	8.55	33.93	2.50	2.22	26.37	169.1	0.363	
266	7.47	-	1.01	-	200	8.00	34.04	1.92	2.37	26.54	153.6	0.444	
349	6.81	34.16	0.70	2.80	250	7.60	34.09	1.17	2.53	26.64	145.2	0.519	
536	6.05	34.31	0.39	3.09	300	7.18	34.12	0.85	2.68	26.72	137.7	0.589	
814	4.70	34.43	0.56	3.09	400	6.58	34.21	0.55	2.91	26.88	124.6	0.720	
1113	3.78	34.43	0.68	2.95	500	6.19	34.29	0.40	3.06	26.99	114.5	0.839	
					600	5.76	34.36	0.41	3.09	27.10	105.1	0.950	
					700	5.20	34.40	0.47	3.09	27.20	96.2	1.050	
					800	4.75	34.43	0.56	3.10	27.28	89.4	1.143	
					1000	4.07	34.43	0.64	3.02	27.35	83.1	1.317	
CREST; July 2, 1949; 0247, 0444 GCT; 31°44'N, 120°13'W; sounding, missing; wind, 290°, force 2; weather, overcast; sea, moderate; wire angle, 20°, 25°.													904
0	15.8	33.38	5.79	0.49	0	15.8	33.38	5.79	0.49	24.57	338.1	0.000	
9	15.73	33.33	5.75	0.49	10	15.74	33.33	5.75	0.49	24.54	340.7	0.034	
23	15.58	33.33	5.83	0.51	20	15.67	33.33	5.81	0.50	24.56	339.3	0.068	
46	15.27	33.35	5.90	0.50	30	15.55	33.33	5.86	0.51	24.59	337.2	0.102	
69	13.84	33.44	5.96	0.54	50	15.14	33.36	5.92	0.50	24.70	327.0	0.168	
92	-	33.40	5.45	0.88	75	13.37	33.44	5.94	0.56	25.13	286.6	0.245	
136	10.06	33.57	3.92	1.65	100	11.70	33.40	5.13	1.04	25.42	259.0	0.313	
178	8.96	33.90	2.63	2.15	150	9.62	33.66	3.45	1.85	25.99	205.7	0.430	
230p	8.26	34.11	1.98	2.44	200	8.60	34.02	2.31	2.28	26.44	164.0	0.522	
464p	6.69	34.29	0.43	3.04	250	8.12	34.14	1.73	2.52	26.60	149.0	0.600	
790p	4.80	34.44	0.41	3.14	300	7.78	34.20	1.26	2.69	26.70	140.4	0.672	
1085p	3.78	-	0.75	-	400	7.12	34.26	0.60	2.93	26.84	128.0	0.807	
					500	6.48	34.30	0.43	3.08	26.96	117.8	0.930	
348	6.93r	34.14	1.24	2.89	600	5.86	34.35	0.43	3.11	27.08	107.2	1.042	
803	4.70	34.59r	0.45	-	700	5.26	34.41	0.42	3.13	27.20	96.2	1.144	
1275	3.35	34.54	0.91	3.37	800	4.76	34.44	0.42	3.15	27.28	88.8	1.236	
1761	2.44	34.58	1.46	3.01	1000	4.06	34.49	0.64	3.26	27.40	78.5	1.404	
					1200	3.52	34.53	0.81	3.35	27.48	70.8	1.553	
					1500	2.85	34.57	1.16	3.24	27.58	62.0	1.753	
CREST; July 2, 1949; 1026 GCT; 31°27'N, 120°53'W; sounding, missing; wind, 315°, force 3; weather, overcast; sea, moderate; wire angle, 0°.													905
0	16.6	33.39	5.66	1.16r	0	16.6	33.39	5.66	0.44	24.41	353.6	0.000	
10	16.43	33.37	5.60	0.44	10	16.43	33.37	5.60	0.44	24.42	352.9	0.035	
25	16.43	33.37	5.69	0.49	20	16.43	33.37	5.65	0.48	24.42	353.2	0.071	
50	14.38	33.37	6.35	0.42	30	16.28	33.37	5.77	0.48	24.45	350.1	0.106	
75	12.55	33.31	6.09	0.53	50	14.38	33.37	6.35	0.42	24.87	310.7	0.172	
100	11.61	33.40	5.38	0.86	75	12.55	33.31	6.09	0.53	25.19	280.4	0.246	
150	9.47	33.66	3.72	1.56	100	11.61	33.40	5.38	0.86	25.44	257.2	0.313	
199	8.65	33.96	2.97	1.98	150	9.47	33.66	3.72	1.56	26.01	203.5	0.429	
298	7.41	34.07	1.77	-	200	8.64	33.97	2.97	1.99	26.39	168.3	0.521	
397	6.51	34.13	0.98	2.77	250	7.94	34.04	2.33	2.25	26.55	153.6	0.601	
596	5.42	34.27	0.41	3.09	300	7.38	34.07	1.77	2.46	26.66	144.2	0.676	
894	4.22	34.38	0.66	3.04	400	6.51	34.13	0.97	2.78	26.82	129.5	0.813	
1192	3.42	34.42	0.88	2.95	500	5.90	34.21	0.60	3.00	26.96	116.8	0.936	
					600	5.38	34.27	0.41	3.09	27.07	107.0	1.048	
					700	4.94	34.32	0.45	3.08	27.17	98.9	1.150	
					800	4.54	34.36	0.58	3.06	27.24	91.9	1.247	
					1000	3.88	34.41	0.75	3.01	27.35	82.5	1.421	

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	OBSERVED					INTERPOLATED					COMPUTED		
	Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
	m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
906	CREST; July 2, 1949; 1807 GCT; 31°08'N, 121°34'W; sounding, missing; wind, 315°, force 2; weather, overcast; sea, rough; wire angle, 20°.												
	0	16.8	33.42	5.65	0.66	0	16.8	33.42	5.65	0.66	24.38	356.3	0.000
	9	16.76	33.42	5.61	0.57	10	16.77	33.42	5.61	0.57	24.38	356.6	0.036
	23	16.76	33.48	5.58	0.53	20	16.77	33.48	5.58	0.53	24.42	352.4	0.071
	46	16.22	33.39	5.70	0.58	30	16.74	33.46	5.60	0.53	24.42	353.5	0.106
	70	12.61	33.37	5.93	0.72	50	15.50	33.38	5.74	0.60	24.64	332.9	0.175
	94	11.01	33.37	4.87	1.23	75	12.28	33.37	5.92	0.81	25.29	270.9	0.250
	140	9.32	33.58	3.67	1.75	100	10.73	33.38	4.70	1.31	25.58	243.7	0.315
	187	8.59	33.91	2.66	2.17	150	9.16	33.66	3.45	1.84	26.06	198.5	0.426
	283	7.35	34.09	1.69	-	200	8.40	33.95	2.48	2.25	26.41	166.1	0.517
	379	6.58	34.18	0.78	2.99	250	7.73	34.05	1.97	2.52	26.59	149.9	0.595
	572	5.54	34.27	0.34	3.30	300	7.21	34.11	1.53	2.74	26.71	138.9	0.668
	864	4.28	34.42	0.50	3.32	400	6.47	34.20	0.68	3.04	26.88	123.7	0.799
	1158	3.46	34.51	0.81	3.22	500	5.89	34.24	0.43	3.24	26.99	114.5	0.918
						600	5.40	34.28	0.34	3.31	27.08	106.5	1.029
						700	4.95	34.33	0.34	3.32	27.17	98.3	1.131
						800	4.53	34.39	0.42	3.32	27.27	89.5	1.225
						1000	3.85	34.47	0.65	3.29	27.40	77.6	1.392
907	CREST; July 2, 1949; 2328 GCT; 30°48'N, 122°15'W; sounding, missing; wind, 315°, force 2; weather, overcast; sea, rough; wire angle, 30°.												
	0	16.5	33.31	5.70	0.47	0	16.5	33.31	5.70	0.47	24.37	357.4	0.000
	9	16.41	33.28	5.87	0.41	10	16.40	33.28	5.87	0.41	24.35	359.1	0.036
	21	16.34	33.31	5.86	0.46	20	16.36	33.31	5.86	0.46	24.39	355.9	0.072
	43	15.42	33.26	5.92	0.43	30	16.27	33.28	5.88	0.45	24.38	356.6	0.107
	65	13.27	33.30	6.02	0.50	50	14.49	33.27	5.95	0.44	24.77	320.3	0.175
	86	13.51	33.44	5.95	0.45	75	13.37	33.36	6.00	0.48	25.07	292.5	0.252
	130	10.76	33.37	5.19	1.06	100	12.90	33.43	5.82	0.54	25.22	278.6	0.323
	174	9.04	33.62	4.17	1.53	150	9.77	33.48	4.68	1.31	25.82	221.5	0.448
	263	7.59	33.96	3.32	-	200	8.48	33.71	3.87	1.74	26.21	185.3	0.550
	352	6.82	34.13	1.44	2.59	250	7.75	33.91	3.44	2.10	26.48	160.7	0.636
	532	5.94	34.25	0.42	2.97	300	7.22	34.05	2.59	2.38	26.66	143.4	0.713
	812	4.52	34.34	0.42	3.02	400	6.54	34.18	0.94	2.74	26.86	126.1	0.846
	1100	3.61	34.52	0.78	2.95	500	6.07	34.24	0.48	2.94	26.97	116.7	0.968
						600	5.60	34.27	0.42	3.00	27.05	109.8	1.081
						700	5.07	34.30	0.42	3.02	27.14	101.8	1.187
						800	4.58	34.34	0.42	3.02	27.22	94.0	1.285
						1000	3.85	34.46	0.64	2.99	27.39	78.3	1.457
908	CREST; July 3, 1949; 0724 GCT; 30°30'N, 122°57'W; sounding, missing; wind, 330°, force 2; weather, overcast; sea, rough; wire angle, 35°.												
	0	17.2	33.49	5.57	0.48	0	17.2	33.49	5.57	0.48	24.32	361.5	0.000
	9	17.23	33.44	5.55	0.48	10	17.23	33.44	5.55	0.48	24.28	365.5	0.036
	20	17.24	33.42	5.62	0.51	20	17.24	33.42	5.62	0.51	24.27	366.9	0.073
	41	16.50	34.23r	5.79	0.42	30	17.08	33.42	5.69	0.48	24.30	364.3	0.110
	62	14.53	33.46	5.95	0.42	50	15.55	33.44	5.88	0.41	24.67	329.8	0.179
	83	14.08	33.51	5.88	0.51	75	14.27	33.50	5.93	0.46	24.99	299.8	0.258
	125	12.53	33.46	5.54	0.69	100	13.59	33.50	5.78	0.58	25.13	286.8	0.331
	168	9.56	33.46	4.76	1.36	150	10.57	33.46	5.14	1.01	25.67	236.1	0.461
	252	8.06	33.96	2.88	-	200	8.97	33.61	4.04	1.73	26.06	200.1	0.571
	336	6.88	34.07	1.65	2.54	250	8.08	33.96	2.92	2.15	26.47	161.6	0.661
	504	5.78	34.18	0.59	2.97	300	7.33	34.03	2.12	2.40	26.63	146.3	0.738
	771	4.54	34.36	0.39	3.05	400	6.38	34.12	1.09	2.76	26.83	128.5	0.875
	1146	3.49	34.47	0.90	3.04	500	5.82	34.18	0.60	2.96	26.95	118.0	0.999
						600	5.31	34.26	0.44	3.02	27.08	106.9	1.111
						700	4.85	34.32	0.39	3.04	27.17	97.9	1.213
						800	4.41	34.37	0.39	3.05	27.27	89.6	1.307
						1000	3.81	34.43	0.57	3.04	27.37	80.2	1.477

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

CREST; July 3, 1949; 1247 GCT; 30°11'N, 123°37'W; sounding, missing; wind, 347°, force 2; weather, overcast; sea, rough; wire angle, 50°. 909

0	17.5	33.57	5.41	0.53	0	17.5	33.57	5.41	0.53	24.31	362.8	0.000	
10	17.54	33.57	5.51	0.53	10	17.54	33.57	5.51	0.53	24.31	363.1	0.036	
25	17.54	33.57	5.07	0.37	20	17.53	33.57	5.15	0.40	24.31	363.1	0.073	
50	15.57	33.48	5.70	0.41	30	17.50	33.56	5.07	0.37	24.31	363.6	0.109	
75	14.65	33.51	5.74	0.34	50	15.57	33.48	5.70	0.41	24.70	327.4	0.178	
99	13.97	33.46	5.86	0.36	75	14.65	33.51	5.74	0.34	24.92	306.7	0.257	
148	12.06	33.43	5.30	0.38	100	13.95	33.46	5.86	0.36	25.03	296.9	0.333	
195	9.12	33.60	4.49	0.73	150	11.56	33.43	5.26	0.38	25.47	255.3	0.470	
290	7.88	33.98	3.27	1.31	200	9.07	33.63	4.45	0.76	26.06	200.0	0.585	
385	6.86	34.09	1.49	2.66	250	8.35	33.86	3.82	1.06	26.36	173.0	0.678	
579	5.46	34.27	0.45	3.07	300	7.77	34.00	3.11	1.40	26.54	155.0	0.760	
871	4.17	34.38	0.49	3.15	400	6.75	34.11	1.25	2.72	26.77	134.2	0.904	
1164	3.36	34.49	0.96	2.99	500	5.96	34.21	0.52	2.96	26.96	117.5	1.030	
					600	5.34	34.28	0.45	3.09	27.09	105.6	1.142	
					700	4.85	34.32	0.45	3.14	27.17	97.9	1.244	
					800	4.43	34.35	0.45	3.15	27.25	91.4	1.338	
					1000	3.76	34.43	0.67	3.11	27.38	79.5	1.509	

CREST; July 3, 1949; 2004 GCT; 29°51'N, 124°21'W; sounding, missing; wind, 320°, force 5; weather, drizzle; sea, rough; wire angle, 18°. 910

0	17.9	33.77	5.39	0.66	0	17.9	33.77	5.39	0.66	24.38	356.5	0.000	
10	17.89	33.73	5.53	0.43	10	17.89	33.73	5.53	0.43	24.35	359.5	0.036	
23	17.87	33.71	5.54	0.55	20	17.87	33.72	5.54	0.54	24.34	360.2	0.072	
47	16.13	33.58	5.61	0.49	30	17.83	33.69	5.56	0.54	24.33	361.5	0.108	
71	14.45	33.44	5.81	0.49	50	15.69	33.56	5.65	0.48	24.73	323.9	0.176	
95	13.98	33.44	5.95	0.54	75	14.39	33.44	5.84	0.49	24.92	306.4	0.255	
144	11.48	33.30	5.09	0.91	100	13.78	33.44	5.91	0.56	25.05	295.1	0.330	
192	9.48	33.73	4.04	1.38	150	11.10	33.32	5.00	0.98	25.47	255.4	0.468	
288	7.76	33.98	2.62	2.10	200	9.34	33.76	3.95	1.44	26.11	194.7	0.581	
385	6.64	34.11	1.38	2.63	250	8.37	33.91	3.18	1.85	26.38	169.5	0.672	
578	5.43	34.27	0.36	3.01	300	7.62	34.00	2.44	2.18	26.57	152.9	0.752	
868	4.19	34.42	0.49	3.08	400	6.52	34.13	1.24	2.69	26.82	129.5	0.893	
1253	3.36	34.52	1.01	3.02	500	5.84	34.22	0.56	2.92	26.98	115.3	1.016	
					600	5.33	34.29	0.36	3.02	27.10	105.0	1.126	
					700	4.88	34.35	0.36	3.06	27.20	95.7	1.226	
					800	4.45	34.40	0.41	3.08	27.29	87.8	1.318	
					1000	3.80	34.46	0.61	3.08	27.40	77.7	1.483	

CREST; July 4, 1949; 2449 GCT; 29°32'N, 124°54'W; sounding, missing; wind, 020°, force 3; weather, overcast; sea, rough; wire angle, 3°. 911

0	18.2	33.71	5.23	0.43	0	18.2	33.71	5.23	0.43	24.26	367.7	0.000	
10	18.15	33.75	5.11	0.38	10	18.15	33.75	5.11	0.38	24.30	364.0	0.037	
25	18.14	33.73	5.19	0.38	20	18.14	33.74	5.15	0.38	24.29	364.9	0.073	
50	16.01	33.48	5.40	0.38	30	18.10	33.71	5.23	0.38	24.27	366.6	0.110	
74	14.39	33.42	5.57	0.41	50	16.01	33.48	5.40	0.38	24.60	336.8	0.180	
98	13.91	33.40	5.60	0.42	75	14.38	33.42	5.58	0.41	24.91	307.7	0.260	
146	12.30	33.40	5.29	0.73	100	13.84	33.40	5.60	0.42	25.00	299.2	0.336	
196	10.32	33.66	4.45	1.19	150	12.22	33.41	5.25	0.76	25.34	268.5	0.478	
292	7.88	33.96	3.01	-	200	10.08	33.67	4.40	1.21	25.92	213.3	0.599	
390	6.81	34.13	1.23	2.73	250	8.58	33.84	3.63	1.70	26.30	178.0	0.697	
585	5.46	34.25	0.38	3.15	300	7.77	33.98	2.89	2.11	26.53	156.5	0.780	
879	4.22	34.43	0.46	3.17	400	6.73	34.13	1.11	2.77	26.79	132.4	0.925	
1174	3.37	34.52	0.85	3.01	500	5.95	34.20	0.50	3.06	26.95	118.2	1.050	
					600	5.39	34.26	0.35	3.15	27.07	107.9	1.163	
					700	4.93	34.32	0.35	3.16	27.17	98.9	1.267	
					800	4.50	34.38	0.40	3.17	27.27	89.9	1.361	
					1000	3.85	34.48	0.58	3.12	27.41	76.9	1.528	

SIO

CCOFI
4907

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

1001 CREST; July 7, 1949; 0643 GCT; 31°20'N, 116°55'W; sounding, missing; wind, 330°, force 2; weather, cloudy; sea, rough; wire angle, 0°.

0	18.9	33.75	5.28	0.55	0	18.9	33.75	5.28	0.55	24.11	381.5	0.000
10	18.90	33.68	5.38	0.39	10	18.90	33.68	5.38	0.39	24.06	386.9	0.038
25	17.10	33.62	5.85	0.43	20	18.43	33.63	5.75	0.41	24.14	379.5	0.077
50	12.58	33.55	5.98	0.65	30	15.50	33.60	5.90	0.48	24.81	316.4	0.112
75	10.22	33.62	3.94	1.59	50	12.50	33.55	5.98	0.65	25.39	261.1	0.169
99	9.46	33.78	3.27	1.80	75	10.22	33.62	3.94	1.59	25.86	216.5	0.229
148	9.67	34.16	1.67	2.28	100	9.45	33.79	3.25	1.81	26.12	192.3	0.280
198	9.46	34.25	1.50	2.49	150	9.68	34.16	1.66	2.28	26.37	169.5	0.371
297	8.95	34.33	0.84	2.84	200	9.46	34.27	1.48	2.49	26.50	158.4	0.452
396	7.67	34.29	0.69	2.92	250	9.23	34.32	1.10	2.71	26.57	152.7	0.530
594	6.18	34.36	0.40	3.18	300	8.93	34.33	0.83	2.84	26.63	147.0	0.605
694	5.48	34.30	0.43	3.17	400	7.63	34.29	0.69	2.92	26.79	133.4	0.745
					500	6.86	34.32	0.54	3.04	26.92	121.6	0.873
					600	6.12	34.36	0.40	3.17	27.06	109.6	0.988
					700	(5.43)	(34.39)	(0.44)	(3.16)	(27.16)	(99.9)	(1.093)

1002 CREST; July 7, 1949; 0100 GCT; 30°58'N, 117°33'W; sounding, missing; wind, 315°, force 4; weather, cloudy; sea, rough; wire angle, 11°.

0	18.5	33.69	5.70	0.55	0	18.5	33.69	5.70	0.55	24.18	375.0	0.000
9	18.41	33.68	5.74	0.40	10	18.41	33.68	5.74	0.40	24.18	375.2	0.038
22	18.29	33.69	5.45	0.41	20	18.30	33.69	5.50	0.41	24.21	372.2	0.075
46	13.12	33.53	5.98	0.75	30	17.94	33.65	5.50	0.45	24.27	367.0	0.112
69	10.87	33.62	3.78	1.36	50	12.43	33.53	6.01	0.82	25.39	261.2	0.175
93	10.01	33.69	3.27	1.60	75	10.63	33.64	3.62	1.44	25.80	222.2	0.235
140	8.70	33.91	3.81	1.74	100	9.70	33.71	3.30	1.63	26.02	202.2	0.288
188	8.28	34.04	2.42	2.18	150	8.59	33.94	3.75	1.80	26.37	169.0	0.381
282	7.78	34.20	1.27	2.73	200	8.21	34.07	2.12	2.30	26.53	154.6	0.461
377	6.96	34.23	0.88	2.91	250	7.97	34.17	1.48	2.61	26.65	144.6	0.537
567	5.78[a]	34.36	0.41	3.18	300	7.63	34.20	1.19	2.76	26.72	138.3	0.607
854	4.42	34.47	0.53	3.18	400	6.79	34.25	0.76	2.95	26.88	124.3	0.738
1149	3.56	34.52	0.90	-	500	6.16	34.32	0.48	3.12	27.02	112.0	0.857
					600	5.60	34.38	0.41	3.18	27.13	101.7	0.963
					700	5.10	34.42	0.42	3.18	27.23	93.3	1.061
					800	4.65	34.46	0.50	3.18	27.31	86.0	1.150
					1000	3.96	34.51	0.70	-	27.42	75.9	1.313

1003 CREST; July 6, 1949; 1806 GCT; 30°37'N, 118°12'W; sounding, missing; wind, 330°, force 4; weather, overcast; sea, very rough; wire angle, 14°.

0	17.4	33.60	5.28	0.65	0	17.4	33.60	5.28	0.65	24.37	357.4	0.000
10	17.40	33.57	5.55	0.46	10	17.40	33.57	5.55	0.46	24.34	359.9	0.036
24	17.42	33.57	5.48	0.58	20	17.40	33.57	5.51	0.48	24.34	360.0	0.072
47	13.81	33.28	6.13	0.42	30	17.36	33.50	5.54	0.58	24.30	364.6	0.108
71	12.90	33.32	6.01	0.53	50	13.69	33.28	6.13	0.42	24.94	303.5	0.175
96	11.24	33.44	5.45	0.98	75	12.49	33.33	5.91	0.54	25.22	277.6	0.248
144	9.86	33.78	3.48	1.96	100	11.10	33.46	5.31	1.03	25.58	244.0	0.313
192	9.27	34.11	2.36	2.41	150	9.76	33.84	3.29	2.05	26.11	194.4	0.423
288	8.60	34.33	1.51	2.82	200	9.22	34.14	2.29	2.46	26.43	164.7	0.512
385	7.50	34.29	1.02	3.05	250	8.90	34.29	1.77	2.68	26.60	149.6	0.590
578	5.94	34.33	0.42	3.40	300	8.47	34.33	1.47	2.85	26.70	140.8	0.663
866	4.43	34.43	0.68	3.46	400	7.34	34.29	0.92	3.08	26.83	129.0	0.798
1252	3.50	34.51	0.28r	3.42	500	6.50	34.31	0.55	3.28	26.97	117.2	0.922
					600	5.79	34.34	0.42	3.41	27.08	107.0	1.034
					700	5.20	34.37	0.49	3.46	27.18	98.4	1.136
					800	4.71	34.41	0.64	3.46	27.26	90.4	1.231
					1000	4.04	34.47	-	3.45	27.38	79.8	1.401

a) Left thermometer reading of 5.53° rejected.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

CREST; July 6, 1949; 1053 GCT; 30°15'N, 118°50'W; sounding, missing; wind, 337°, force 6; weather, overcast; sea, very rough; wire angle, 13°. 1004

0	17.2	33.55	5.54	0.77	0	17.2	33.55	5.54	0.77	24.38	355.7	0.000
9	17.16	33.48	5.97	0.44	10	17.16	33.48	5.97	0.45	24.33	361.0	0.036
23	17.17	33.48	5.65	0.41	20	17.16	33.48	5.66	0.42	24.33	361.3	0.072
46	14.09	33.34	6.02	0.41	30	17.10	33.43	5.69	0.41	24.31	364.0	0.108
70	13.24	33.37	6.35	0.44	50	13.96	33.35	6.15	0.42	24.94	303.7	0.175
94	12.10	33.31	5.68	0.67	75	13.05	33.37	6.30	0.46	25.14	285.3	0.249
141	9.86	33.44	4.38	1.34	100	11.83	33.31	5.56	0.73	25.33	267.5	0.318
188	8.74	33.89	3.13	1.89	150	9.60	33.57	4.12	1.45	25.92	212.2	0.438
282	7.54	34.04	1.89	2.49	200	8.57	33.93	2.94	2.00	26.37	170.3	0.533
377	6.51	34.09	1.05	2.89	250	7.90	34.02	2.23	2.33	26.54	154.5	0.614
566	5.22	34.25	0.36	3.29	300	7.33	34.05	1.71	2.58	26.65	144.9	0.690
852	4.18	34.43	0.43	3.31	400	6.32	34.11	0.91	2.98	26.83	128.4	0.825
1143	3.43	34.52	0.80	3.21	500	5.61	34.20	0.46	3.21	26.99	113.9	0.946
					600	5.07	34.28	0.36	3.31	27.12	102.3	1.056
					700	4.67	34.34	0.36	3.31	27.21	93.9	1.153
					800	4.34	34.40	0.39	3.31	27.30	86.6	1.244
					1000	3.76	34.49	0.61	3.27	27.43	75.0	1.405

CREST; July 6, 1949; 0541 GCT; 29°53'N, 119°59'W; sounding, missing; wind, 330°, force 5; weather, overcast; sea, very rough; wire angle, 40°. 1005

0	17.1	33.51	5.40	0.49	0	17.1	33.51	5.40	0.49	24.37	357.4	0.000
8	17.11	33.51	5.46	0.35	10	17.11	33.51	5.47	0.35	24.36	357.7	0.036
20	17.12	33.49	5.50	0.45	20	17.12	33.49	5.50	0.45	24.35	359.7	0.072
40	15.49	33.40	5.95	0.47	30	17.00	33.45	5.85	0.46	24.34	360.3	0.108
61	13.98	33.37	5.90	0.42	50	14.57	33.37	5.94	0.46	24.83	314.5	0.175
82	13.36	33.42	5.83	0.42	75	13.57	33.41	5.86	0.42	25.07	292.4	0.251
122	11.40	33.35	5.26	0.42	100	12.53	33.39	5.61	0.42	25.26	274.6	0.322
162	9.76	33.51	4.31	0.85	150	10.15	33.44	4.62	0.59	25.73	230.5	0.448
245	8.12	-	2.68	1.45	200	8.85	33.81	3.50	1.18	26.23	183.4	0.552
328	7.18	34.11	1.80	2.58	250	8.06	34.01	2.61	1.50	26.51	157.7	0.637
494	5.64	34.16	0.51	3.14	300	7.46	34.09	2.11	2.20	26.66	143.8	0.713
752	4.42	34.38	0.42	3.27	400	6.41	34.13	1.00	2.92	26.83	128.1	0.848
1112	3.51	34.49	0.67	3.21	500	5.60	34.16	0.50	3.14	26.96	116.6	0.970
					600	5.05	34.26	0.42	3.23	27.11	103.7	1.080
					700	4.60	34.34	0.42	3.27	27.22	93.2	1.178
					800	4.27	34.40	0.45	3.27	27.30	85.8	1.268
					1000	3.75	34.47	0.59	3.25	27.41	76.4	1.431

CREST; July 5, 1949; 2232 GCT; 29°32'N, 120°06'W; sounding, missing; wind, 360°, force 5; weather, overcast; sea, rough; wire angle, 12°. 1006

0	18.1	33.71	5.50	0.78	0	18.1	33.71	5.50	0.78	24.28	365.2	0.000
10	18.08	33.71	5.41	0.34	10	18.08	33.71	5.41	0.34	24.29	365.5	0.037
23	18.03	33.71	5.42	0.33	20	18.04	33.71	5.41	0.34	24.28	364.7	0.073
46	16.72	33.75	5.58	0.29	30	17.96	33.72	5.47	0.32	24.32	362.5	0.110
69	15.48	33.62	5.92	0.35	50	16.49	33.75	5.65	0.29	24.70	327.5	0.178
91	14.80	33.60	6.04	0.36	75	15.28	33.61	5.98	0.35	24.86	312.2	0.258
136	13.59	33.44	5.15	0.50	100	14.57	33.57	5.95	0.36	24.98	301.2	0.335
181	11.06	33.53	3.92	1.10	150	12.86	33.44	4.76	0.56	25.23	278.1	0.480
271	8.28	33.96	2.72	-	200	10.18	33.74	3.58	1.50	25.96	209.7	0.602
361	7.28	34.05	1.60	2.45	250	8.70	33.93	2.92	1.96	26.35	173.1	0.698
542	5.58	34.16	0.54	2.97	300	7.91	33.99	2.45	2.22	26.51	157.8	0.780
817	4.40	34.43	0.47	3.08	400	6.85	34.08	1.35	2.58	26.74	137.8	0.928
1110	3.56	34.49	0.80	3.04	500	5.88	34.14	0.78	2.89	26.91	121.6	1.058
					600	5.25	34.21	0.47	3.03	27.04	109.8	1.174
					700	4.81	34.31	0.47	3.06	27.17	98.1	1.278
					800	4.46	34.42	0.47	3.08	27.30	86.4	1.370
					1000	3.85	34.48	0.65	3.06	27.41	76.9	1.533

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
1007	CREST; July 5, 1949; 1758 GCT; 29°10'N, 120°46'W; sounding, missing; wind, 330°, force 4; weather, overcast; sea, rough; wire angle, 28°.											
0	18.4	33.95	5.41	0.56	0	18.4	33.95	5.41	0.56	24.38	355.9	0.000
8	18.67	33.87	5.44	0.43	10	18.67	33.87	5.44	0.43	24.26	367.6	0.036
21	18.67	33.87	5.38	0.40	20	18.67	33.87	5.38	0.40	24.26	367.9	0.073
42	17.28	33.80	5.79	0.36	30	18.50	33.85	5.60	0.38	24.29	365.7	0.110
65	15.40	33.66	5.83	0.36	50	16.07	33.72	5.82	0.36	24.77	320.7	0.178
87	15.16	33.75	5.80	0.34	75	15.30	33.68	5.81	0.36	24.91	307.5	0.257
130	13.04	33.55	5.23	0.74	100	14.90	33.71	5.70	0.41	25.02	297.6	0.332
174	10.58	33.62	4.30	1.13	150	11.85	33.56	4.81	0.90	25.52	250.8	0.469
262	8.37	-	2.71	-	200	9.50	33.72	3.80	1.40	26.06	200.1	0.583
350	8.09	34.33	0.89	2.79	250	8.50	34.04	2.92	2.00	26.46	162.1	0.673
525	6.52	34.34	0.34	3.17	300	8.25	34.23	2.00	2.43	26.65	145.2	0.749
793	4.86	34.43	0.35	3.24	400	7.70	34.33	0.61	3.01	26.81	131.2	0.888
1173	3.60	34.43	0.81	3.22	500	6.75	34.34	0.35	3.15	26.96	118.5	1.012
					600	5.95	34.37	0.34	3.21	27.08	107.1	1.125
					700	5.32	34.41	0.34	3.23	27.19	97.0	1.227
					800	4.82	34.43	0.35	3.24	27.27	90.3	1.321
					1000	4.06	34.43	0.60	3.24	27.35	83.0	1.494
1008	CREST; July 5, 1949; 1114 GCT; 28°50'N, 121°19'W; sounding, missing; wind, 340°, force 3; weather, drizzle; sea, rough; wire angle, 3°.											
0	18.6	33.84	5.25	0.80	0	18.6	33.84	5.25	0.80	24.25	368.0	0.000
9	18.63	33.84	5.26	0.36	10	18.63	33.84	5.26	0.36	24.25	368.2	0.037
23	18.63	33.86	5.22	0.35	20	18.63	33.86	5.23	0.35	24.27	367.2	0.074
47	17.05	33.86	5.51	0.32	30	18.57	33.86	5.32	0.35	24.28	366.4	0.110
71	16.00	33.96	5.54	0.38	50	16.93	33.87	5.52	0.32	24.68	328.5	0.180
95	15.41	33.77	5.48	0.35	75	15.88	33.96	5.53	0.38	25.00	299.4	0.258
143	14.26	33.86	5.15	0.55	100	15.42[a]	33.77	5.45	0.35	24.95	304.0	0.334
191	10.06	33.69	3.86	1.48	150	13.65	33.86	5.07	0.60	25.40	262.9	0.475
288	8.19	34.05	3.32	2.16	200	9.78	33.69	3.80	1.54	25.99	206.7	0.593
386	7.06	34.11	1.42	2.74	250	8.77	33.91	3.55	1.92	26.32	175.6	0.689
581	5.51	34.27	0.56	3.03	300	8.07	34.07	3.22	2.23	26.55	154.5	0.771
875	4.44	34.47	0.45	3.20	400	6.92	34.12	1.31	2.76	26.76	135.7	0.916
1170	3.62	34.49	0.77	3.08	500	6.04	34.20	0.76	2.93	26.94	119.6	1.044
					600	5.44	34.29	0.55	3.05	27.08	106.3	1.157
					700	5.01	34.38	0.45	3.14	27.20	95.3	1.258
					800	4.66	34.44	0.45	3.18	27.29	87.5	1.349
					1000	4.06	34.49	0.55	3.16	27.40	78.5	1.515
1009	CREST; July 5, 1949; 0614 GCT; 28°30'N, 121°52'W; sounding, missing; wind, 335°, force 4; weather, overcast; sea, rough; wire angle, 15°.											
0	18.7	33.82	5.45	0.62	0	18.7	33.82	5.45	0.62	24.21	372.3	0.000
10	18.73	33.75	5.45	0.37	10	18.73	33.75	5.45	0.37	24.16	377.6	0.037
24	18.70	33.75	5.53	0.35	20	18.73	33.75	5.52	0.36	24.16	377.7	0.075
48	16.77	33.68	5.88	0.35	30	18.55	33.74	5.62	0.35	24.19	374.8	0.113
72	15.53	33.62	5.96	0.37	50	16.75	33.67	5.89	0.36	24.57	339.1	0.184
96	14.64	33.64	5.88	0.36	75	15.47	33.62	5.95	0.37	24.83	315.5	0.266
145	11.89	33.49	4.66	1.04	100	14.54	33.64	5.80	0.36	25.04	295.7	0.343
193	9.72	33.84	3.19	1.77	150	11.65	33.49	4.50	1.27	25.50	252.6	0.479
288	8.68	34.18	1.66	2.34	200	9.57	33.90	2.97	1.82	26.18	188.1	0.590
384	7.26	34.09r	1.15	2.69	250	9.05	34.12	2.05	2.16	26.44	164.7	0.678
574	5.76	34.33	0.46	3.01	300	8.54	34.19	1.60	2.39	26.58	152.4	0.757
864	4.32	34.40	0.61	3.07	400	7.11	34.25	1.07	2.74	26.84	128.7	0.898
1161	3.52	34.54	0.90	2.97	500	6.27	34.30	0.61	2.96	26.99	114.9	1.019
					600	5.60	34.34	0.46	3.02	27.10	104.7	1.129
					700	5.05	34.37	0.48	3.06	27.19	96.5	1.230
					800	4.58	34.39	0.55	3.07	27.26	90.3	1.323
					1000	3.90	34.46	0.75	3.04	27.39	78.9	1.492

a) Interpolation from 95 to 143 meters based on bathythermograph.

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

CREST; July 4, 1949; 2335 GCT; 28°13'N, 122°25'W; sounding, missing; wind, 360°, force 3; weather, overcast; sea, rough; wire angle, 8°. 1010

0	18.7	33.84	5.42	0.99	0	18.7	33.84	5.42	0.99	24.22	371.5	0.000
10	18.73	33.84	5.45	0.37	10	18.73	33.84	5.45	0.37	24.22	371.6	0.037
23	18.69	33.75	5.45	0.32	20	18.72	33.76	5.45	0.33	24.17	376.8	0.075
47	17.23	33.75	5.70	-	30	18.36	33.75	5.48	0.32	24.25	369.4	0.112
71	15.57	33.64	6.00	0.43	50	17.00	33.75	5.73	0.34	24.58	338.9	0.183
95	13.77	33.49	5.62	0.54	75	15.28	33.62	6.00	0.44	24.87	311.6	0.264
143	10.86	33.55	3.86	1.41	100	13.00	33.48	5.38	0.57	25.24	276.8	0.338
191	9.60	33.87	2.96	1.89	150	10.65	33.60	3.68	1.48	25.77	227.0	0.463
286	7.90	34.07	2.30	-	200	9.40	33.90	2.88	1.97	26.22	185.3	0.567
382	6.77	34.07	1.40	2.70	250	8.45	34.04	2.54	2.50	26.47	161.3	0.653
576	5.39	34.20	0.45	3.14	300	7.73	34.07	2.20	2.76	26.61	149.2	0.730
867	4.17	34.38	0.54	3.12	400	6.61	34.08	1.29	2.99	26.77	134.6	0.872
1159	3.45	34.52	0.80	3.06	500	5.80	34.13	0.65	3.10	26.91	122.0	1.001
					600	5.24	34.22	0.45	3.14	27.05	109.0	1.116
					700	4.78	34.29	0.47	3.14	27.16	99.0	1.220
					800	4.39	34.35	0.50	3.13	27.25	90.9	1.315
					1000	3.81	34.44	0.64	3.09	27.38	79.4	1.486

CREST; July 4, 1949; 1739 GCT; 27°54'N, 122°58'W; sounding, missing; wind, 360°, force 4; weather, overcast; sea, rough; wire angle, 10°. 1011

0	18.6	33.87	5.38	2.81r	0	18.6	33.87	5.38	(0.37)	24.27	366.5	0.000
10	18.65	33.84	5.37	0.37	10	18.65	33.84	5.37	0.37	24.24	369.1	0.037
24	18.65	33.84	5.38	0.37	20	18.65	33.84	5.38	0.38	24.24	369.4	0.074
48	18.65	33.86	5.44	0.35	30	18.65	33.84	5.40	0.37	24.24	369.8	0.111
73	15.88	33.69	5.88	0.38	50	18.65	33.86	5.48	0.34	24.26	369.1	0.185
98	13.85	33.57	5.41	0.58	75	15.75	33.66	5.87	0.39	24.80	318.6	0.270
147	10.80	33.62	3.72	1.52	100	13.75	33.57	5.36	0.59	25.15	284.7	0.346
196	9.18	33.91	3.22	1.85	150	10.60	33.63	3.70	1.53	25.80	224.0	0.473
295	8.24	-	1.53	2.44	200	9.15	33.92	3.16	1.88	26.27	180.0	0.574
394	6.38	34.14	1.13	2.88	250	8.70	33.99	2.22	2.19	26.40	168.7	0.661
590	5.84	34.38	0.30	3.21	300	8.20	34.05	1.50	2.46	26.52	157.6	0.742
886	4.36	34.45	0.45	3.25	400	6.35	34.15	1.10	2.90	26.86	125.9	0.884
1182	3.45	34.49	0.91	3.26	500	6.04	34.27	0.58	3.11	26.99	114.2	1.004
					600	5.79	34.38	0.30	3.22	27.11	104.1	1.113
					700	5.31	34.42	0.31	3.25	27.20	96.2	1.213
					800	4.77	34.44	0.37	3.26	27.28	88.9	1.306
					1000	3.93	34.47	0.62	3.26	27.39	78.6	1.473

CREST; July 7, 1949; 1916 GCT; 29°25'N, 116°05'W; sounding, missing; wind, missing, force 2; weather, cloudy; sea, moderate; wire angle, 3°. 1101

0	18.2	33.68	5.25	0.74	0	18.2	33.68	5.25	0.74	24.23	370.0	0.000
10	18.03	33.66	5.38	0.39	10	18.03	33.66	5.38	0.39	24.26	367.7	0.037
25	17.92	33.66	5.45	0.39	20	18.00	33.66	5.45	0.39	24.27	367.4	0.074
48	14.32	33.44	5.86	0.38	30	16.80	33.65	5.48	0.38	24.55	341.2	0.109
72	13.02	33.40	5.91	0.42	50	14.29	33.43	5.86	0.38	24.94	304.5	0.174
96	11.70	33.42	5.58	0.80	75	12.87	33.40	5.90	0.44	25.20	279.8	0.247
143	9.18r	33.73	3.88	1.91	100	11.54	33.43	5.48	0.89	25.48	253.9	0.313
190	9.78	34.25	1.85	2.35	150	10.03	33.85	3.53	1.99	26.07	198.3	0.427
285	9.03	34.40	0.95	2.79	200	9.74	34.28	1.77	2.42	26.45	162.8	0.517
380	7.60	34.31	0.85	2.88	250	9.43	34.38	1.11	2.68	26.58	151.4	0.595
568	6.16	34.31	0.48	3.07	300	8.82	34.39	0.93	2.82	26.69	141.9	0.669
856	4.60	34.42	0.58	3.17	400	7.41	34.31	0.81	2.88	26.84	128.4	0.804
1152	3.68	34.49	1.05	3.17	500	6.62	34.31	0.57	3.00	26.95	119.0	0.928
					600	5.96	34.32	0.48	3.09	27.04	110.8	1.043
					700	5.40	34.36	0.48	3.14	27.14	101.8	1.148
					800	4.87	34.40	0.55	3.16	27.24	93.1	1.246
					1000	4.06	34.46	0.78	3.17	27.37	80.8	1.420

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

1102 CREST; July 8, 1949; 0053 GCT; 29°05'N, 116°43'W; sounding, missing; wind, 330°, force 5; weather, cloudy; sea, moderate; wire angle, 12°.

0	18.8	33.79	5.23	0.44	0	18.8	33.79	5.23	0.44	24.18	375.5	0.000
10	18.50	33.73	5.26	0.39	10	18.50	33.73	5.26	0.39	24.20	373.6	0.038
24	18.32	33.71	5.33	0.36	20	18.39	33.72	5.30	0.36	24.22	372.0	0.075
48	15.86	33.62	5.72	-	30	17.86	33.69	5.40	0.36	24.32	362.3	0.111
71	13.98	33.55	5.74	0.52	50	15.67	33.62	5.73	0.40	24.78	319.2	0.180
96	12.31	33.48	5.30	0.84	75	13.62	33.54	5.73	0.57	25.16	283.8	0.255
144	10.00	33.91	2.71	1.61	100	12.06	33.48	5.22	0.91	25.42	259.4	0.323
192	10.12	34.25	1.38	2.31	150	10.42	33.98	2.50	1.72	26.11	195.1	0.437
287	9.97	34.49	0.49	-	200	10.10	34.29	1.23	2.35	26.40	168.0	0.527
383	8.56	34.40	0.76	2.85	250	10.03	34.45	0.60	2.56	26.54	156.0	0.608
574	6.74	34.42	0.27	2.98	300	9.91	34.49	0.49	2.70	26.59	152.1	0.686
861	4.78	34.42	0.56	3.17	400	8.36	34.40	0.75	2.86	26.77	135.9	0.829
1153	3.64	34.49	1.00	3.08	500	7.37	34.41	0.55	2.93	26.92	122.0	0.958
					600	6.54	34.42	0.28	3.00	27.05	111.2	1.074
					700	5.81	34.42	0.34	3.08	27.14	103.1	1.182
					800	5.16	34.42	0.46	3.14	27.22	95.3	1.281
					1000	4.13	34.45	0.74	3.14	27.36	82.4	1.459

1103 CREST; July 8, 1949; 0709 GCT; 28°47'N, 117°20'W; sounding, missing; wind, 315°, force 3; weather, cloudy; sea, very rough; wire angle, 0°.

0	17.8	33.64	5.65	0.86r	0	17.8	33.64	5.65	(0.43)	24.29	364.0	0.000
10	17.70	33.62	5.78	0.43	10	17.70	33.62	5.78	0.43	24.31	363.2	0.036
25	17.51	33.58	5.56	0.40	20	17.59	33.60	5.60	0.40	24.32	362.3	0.073
49	13.71	33.45	6.10	0.48	30	17.06	33.55	5.57	0.40	24.41	354.3	0.109
73	11.56	33.51	4.95	1.12	50	13.43	33.45	6.10	0.48	25.13	286.3	0.172
98	10.52	33.73	3.17	1.74	75	11.49	33.53	4.48	1.15	25.56	245.0	0.239
148	9.31	33.96	2.66	2.01	100	10.39	33.74	3.13	1.76	25.92	211.1	0.296
197	9.02	34.19	1.75	2.34	150	9.30	33.97	2.66	2.03	26.29	177.7	0.393
296	8.70	34.43	0.53	2.87	200	9.02	34.20	1.70	2.35	26.51	157.2	0.477
395	7.78	34.43	0.40	2.99	250	8.86	34.37	0.91	2.63	26.67	143.0	0.552
593	6.06	34.38	0.31	3.06	300	8.66	34.43	0.54	2.88	26.75	136.5	0.622
891	4.56	34.45	0.50	3.16	400	7.75	34.43	0.39	3.00	26.88	124.6	0.752
1188	3.58	34.51	0.94	3.14	500	6.87	34.40	0.33	3.03	26.99	116.0	0.873
					600	6.01	34.38	0.31	3.06	27.08	107.1	0.984
					700	5.40	34.41	0.35	3.10	27.18	98.2	1.087
					800	4.94	34.43	0.41	3.14	27.25	91.7	1.182
					1000	4.16	34.48	0.63	3.16	27.38	80.4	1.354

1104 CREST; July 8, 1949; 1301 GCT; 28°25'N, 117°58'W; sounding, missing; wind, 315°, force 3; weather, cloudy; sea, rough; wire angle, 3°.

0	18.8	33.71	5.54	0.53	0	18.8	33.71	5.54	0.53	24.11	381.5	0.000
9	18.59	33.66	5.53	0.41	10	18.58	33.66	5.54	0.41	24.12	380.9	0.038
24	18.37	33.64	5.62	0.40	20	18.48	33.64	5.62	0.40	24.13	380.3	0.076
48	11.48	33.53	4.55	1.25	30	17.85	33.62	5.63	0.45	24.27	367.3	0.114
72	10.12	33.71	3.39	1.68	50	11.15	33.53	4.50	1.28	25.62	238.7	0.174
96	9.72	33.87	1.92	1.88	75	10.03	33.74	3.00	1.71	25.98	205.0	0.230
145	9.36	34.14	1.85	2.17	100	9.68	33.90	1.90	1.91	26.17	187.8	0.279
193	8.64	34.22	1.66	2.37	150	9.30	34.15	1.83	2.19	26.42	164.5	0.367
290	7.72	34.25	0.96	2.76	200	8.57	34.22	1.64	2.40	26.59	148.9	0.445
387	6.90	34.29	0.59	3.02	250	8.08	34.24	1.25	2.60	26.68	141.0	0.518
580	5.94	34.38	0.29	3.12	300	7.63	34.25	0.88	2.79	26.76	134.4	0.586
871	4.50	34.45	0.52	3.28	400	6.83	34.30	0.55	3.04	26.91	121.1	0.714
1165	3.58	34.52	0.96	3.26	500	6.33	34.34	0.35	3.09	27.01	112.8	0.831
					600	5.82	34.39	0.30	3.13	27.12	103.9	0.939
					700	5.33	34.41	0.35	3.21	27.19	97.0	1.040
					800	4.84	34.43	0.43	3.26	27.26	90.6	1.133
					1000	4.01	34.47	0.69	3.28	27.39	79.5	1.304

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OBSERVED					INTERPOLATED					COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m

CREST; July 8, 1949; 1826 GCT; 28°04'N, 118°36'W; sounding, missing; wind, 340°, force 2; weather, overcast; sea, rough; wire angle, 15°. 1105

0	18.3	33.64	5.74	0.65	0	18.3	33.64	5.74	0.65	24.18	374.8	0.000
10	18.22	33.60	5.69	0.40	10	18.22	33.60	5.69	0.40	24.17	376.5	0.038
24	18.17	33.64	5.33	0.34	20	18.19	33.62	5.35	0.35	24.19	374.7	0.075
47	17.17	33.66	5.58	0.35	30	18.17	33.65	5.35	0.34	24.22	372.5	0.112
72	15.02	33.57	5.97	0.45	50	16.83	33.66	5.65	0.36	24.55	341.6	0.184
96	-	33.64	5.60	0.45	75	14.99	33.57	5.95	0.45	24.89	309.2	0.265
140	12.16	33.46	5.65	0.90	100	14.32	33.64	5.60	0.46	25.09	291.1	0.340
180	9.98	33.62	4.25	1.73	150	11.44	33.46	5.55	1.18	25.52	251.0	0.475
262	8.31	34.00	2.72	2.55	200	9.50	33.72	3.73	1.99	26.06	200.2	0.589
348	6.84	34.05	1.89	3.04	250	8.57	33.98	2.86	2.45	26.41	167.4	0.681
524	5.74	34.28	0.65	3.23	300	7.48	34.02	2.30	2.80	26.60	149.3	0.759
802	4.55	34.40	0.60	3.42	400	6.52	34.11	1.43	3.13	26.81	131.0	0.900
1087	3.74	34.52	0.82	3.28	500	5.88	34.25	0.73	3.22	27.00	113.5	1.022
					600	5.34	34.32	0.61	3.29	27.12	102.9	1.130
					700	4.90	34.36	0.60	3.37	27.20	95.6	1.229
					800	4.56	34.40	0.60	3.42	27.27	89.1	1.322
					1000	3.96	34.49	0.75	3.34	27.41	77.4	1.488

CREST; July 9, 1949; 0000 GCT; 27°37'N, 119°14'W; sounding, missing; wind, 315°, force 4; weather, cloudy; sea, rough; wire angle, 23°. 1106

0	18.7	33.66	5.70	0.45	0	18.7	33.66	5.70	0.45	24.09	383.3	0.000
9	18.66	33.64	5.45	0.42	10	18.65	33.64	5.45	0.41	24.09	383.9	0.038
22	18.54	33.62	5.45	0.37	20	18.53	33.62	5.45	0.38	24.11	382.8	0.077
44	16.82	33.71	6.01	0.37	30	18.08	33.63	5.48	0.37	24.22	372.0	0.114
67	15.64	33.66	6.11	0.38	50	16.42	33.71	6.08	0.37	24.68	328.7	0.184
89	-	33.63	5.95	0.48	75	15.37	33.66	6.10	0.41	24.88	310.7	0.264
133	13.45	33.51	5.74	0.37	100	14.51	33.59	5.91	0.48	25.01	298.8	0.341
175	10.46	33.66	3.73	0.55	150	12.36	33.53	5.35	0.39	25.40	262.5	0.481
260	8.74	34.07	2.88	2.17	200	9.69	33.81	3.52	1.04	26.10	196.5	0.596
347	7.84	34.22	1.37	2.70	250	8.88	34.04	3.02	2.07	26.41	168.0	0.687
525	6.39	34.33	0.40	3.17	300	8.30	34.15	2.16	2.48	26.58	151.9	0.767
800	4.72	34.41	0.65	3.35	400	7.35	34.27	0.86	2.89	26.82	130.6	0.908
1089	3.77	34.47	0.99	3.20	500	6.56	34.32	0.44	3.13	26.97	117.4	1.032
					600	5.86	34.35	0.42	3.22	27.08	107.1	1.144
					700	5.25	34.39	0.53	3.29	27.19	97.5	1.247
					800	4.72	34.41	0.65	3.35	27.26	90.5	1.341
					1000	4.00	34.45	0.87	3.27	27.37	80.8	1.512

CREST; July 9, 1949; 0554 GCT; 27°19'N, 119°32'W; sounding, missing; wind, 335°, force 3; weather, overcast; sea, rough; wire angle, 4°. 1107

0	19.3	-	5.35	0.53	0	19.3	(33.91)	5.35	0.53	(24.13)	(379.6)	0.000
10	19.30	33.91	5.36	0.41	10	19.30	33.91	5.36	0.41	24.13	380.0	(0.038)
24	19.26	33.87	5.47	0.36	20	19.28	33.89	5.43	0.37	24.12	381.3	0.076
48	17.40	33.68	5.74	0.39	30	19.00	33.85	5.52	0.37	24.16	377.6	0.114
73	15.23	33.62	6.05	-	50	17.25	33.68	5.76	0.40	24.46	349.6	0.187
97	-	33.48	5.47	0.45	75	15.19	33.61	6.04	0.42	24.88	310.4	0.269
146	10.97	33.42	4.31	0.57	100	13.53	33.47	5.40	0.45	25.12	287.8	0.344
196	9.69	33.87	3.36	1.95	150	10.84	33.42	4.25	0.59	25.59	243.6	0.477
293	8.20	34.16	1.93	2.60	200	9.62	33.89	3.34	1.99	26.17	189.5	0.586
392	7.30	34.23	1.20	2.98	250	8.73	34.08	2.50	2.38	26.46	162.5	0.673
588	5.82	34.34	0.39	3.35	300	8.14	34.17	1.85	2.64	26.62	147.9	0.750
882	4.52	34.42	0.68	3.37	400	7.24	34.24	1.14	3.00	26.81	131.3	0.890
1178	3.58	34.52	1.02	3.29	500	6.43	34.30	0.59	3.26	26.97	117.2	1.014
					600	5.76	34.35	0.40	3.35	27.09	106.1	1.126
					700	5.29	34.38	0.50	3.36	27.17	98.7	1.229
					800	4.86	34.40	0.61	3.37	27.24	93.0	1.324
					1000	4.10	34.46	0.83	3.35	27.37	81.2	1.498

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

1108 CREST; July 9, 1949; 1153 GCT; 27°00'N, 120°29'W; sounding, missing; wind, 330°, force 3; weather, overcast; sea, rough; wire angle, 5°.

0	19.4	33.95	5.34	0.34	0	19.4	33.95	5.34	0.34	24.15	378.4	0.000
10	19.27	33.91	5.32	0.34	10	19.27	33.91	5.32	0.34	24.14	379.2	0.038
24	19.27	33.91	5.36	0.35	20	19.29	33.91	5.36	0.35	24.14	380.0	0.076
48	17.31	33.78	5.69	0.33	30	19.05	33.89	5.45	0.36	24.18	375.9	0.114
73	14.91	33.66	5.99	0.40	50	17.18	33.77	5.75	0.33	24.55	341.5	0.185
97	-	33.49	4.86	0.93	75	14.53	33.65	5.99	0.41	25.05	294.1	0.265
146	10.46	33.78	3.15	1.78	100	12.64	33.49	4.72	1.00	25.31	269.4	0.335
196	8.98	33.96	3.08	2.00	150	10.30	33.81	3.15	1.81	25.99	205.6	0.454
294	7.69	34.07	1.97	2.50	200	8.92	33.97	3.08	2.02	26.35	172.6	0.549
391	7.20	34.23	0.85	2.94	250	8.10	34.03	2.66	2.24	26.52	156.8	0.631
587	5.77	34.27	0.37	3.26	300	7.66	34.08	1.85	2.53	26.62	147.4	0.707
882	4.42	34.38	0.68	3.25	400	7.12	34.24	0.81	2.97	26.83	129.6	0.845
1176	3.54	34.51	1.15	3.19	500	6.30	34.26	0.48	3.20	26.95	118.4	0.969
					600	5.69	34.27	0.40	3.26	27.04	111.0	1.084
					700	5.20	34.31	0.44	3.26	27.13	102.9	1.191
					800	4.75	34.34	0.56	3.25	27.20	96.1	1.290
					1000	4.02	34.43	0.87	3.24	27.35	82.6	1.469

1109 CREST; July 9, 1949; 1736 GCT; 26°36'N, 121°07'W; sounding, missing; wind, missing, force 2; weather, overcast; sea, moderate; wire angle, 8°.

0	19.1	33.87	5.60	0.38	0	19.1	33.87	5.60	0.38	24.17	376.5	0.000
10	19.04	33.89	5.51	0.35	10	19.04	33.89	5.51	0.35	24.18	375.2	0.038
25	19.00	33.86	5.31	0.31	20	19.02	33.86	5.30	0.32	24.17	377.0	0.075
37	18.28	33.96	5.70	0.28	30	18.95	33.87	5.36	0.30	24.19	374.9	0.113
59	16.94	33.95	6.04	0.28	50	17.35	33.96	5.99	0.28	24.66	331.3	0.183
80	16.33	33.93	5.50	0.31	75	16.40	33.94	5.53	0.30	24.86	312.2	0.264
112	15.39	33.78	6.16	0.34	100	15.85	33.88	6.00	0.32	24.94	305.8	0.341
143	12.53	33.58	6.11	0.85	150	12.25	33.58	6.05	0.92	25.46	256.3	0.481
208	10.36	33.66	4.04	1.48	200	10.52	33.63	4.26	1.40	25.81	223.7	0.602
370	7.14	34.16	1.58	2.75	250	9.35	33.83	3.24	1.89	26.17	190.6	0.705
550	5.84	34.33	0.69	3.23	300	8.30	34.00	2.49	2.29	26.47	162.7	0.793
828	4.58	34.45	0.84	3.30	400	6.86	34.20	1.30	2.89	26.83	129.0	0.939
1119	3.65	34.51	0.90	3.28	500	6.14	34.30	0.76	3.16	27.00	113.3	1.060
					600	5.57	34.36	0.70	3.26	27.12	102.8	1.168
					700	5.10	34.40	0.78	3.29	27.21	94.9	1.267
					800	4.70	34.44	0.83	3.30	27.29	88.0	1.359
					1000	4.00	34.49	0.87	3.30	27.40	77.9	1.524

1110 CREST; July 9, 1949; 2330 GCT; 26°14'N, 121°48'W; sounding, missing; wind, 330°, force 3; weather, overcast; sea, rough; wire angle, 10°.

0	19.5	33.98	5.29	0.38	0	19.5	33.98	5.29	0.38	24.13	379.5	0.000
10	19.51	33.96	3.43r	0.35	10	19.51	33.96	5.33	0.35	24.12	381.3	0.038
25	19.37	33.96	5.41	0.39	20	19.45	33.96	5.39	0.38	24.13	380.2	0.076
50	17.42	33.96	6.00	0.32	30	18.95	33.96	5.53	0.39	24.26	368.4	0.114
75	16.07	33.88	6.03	0.40	50	17.42	33.96	6.00	0.32	24.64	333.1	0.184
99	15.35	33.73	5.94	0.38	75	16.07	33.88	6.03	0.40	24.89	309.8	0.264
149	13.80	33.57	5.74	0.58	100	15.33	33.72	5.94	0.38	24.94	305.9	0.341
198	10.43	33.60	4.40	1.42	150	13.68	33.57	5.73	0.61	25.17	284.7	0.488
294	8.54	34.09	2.56	2.49	200	10.35	33.61	4.35	1.45	25.83	222.2	0.615
390	7.28	34.20	1.36	2.86	250	9.27	33.98	3.28	2.10	26.30	178.3	0.716
583	5.72	34.31	0.42	3.39	300	8.47	34.10	2.48	2.52	26.52	158.0	0.800
876	4.46	34.43	0.69	3.38	400	7.18	34.20	1.29	2.90	26.79	133.4	0.945
1174	3.58	34.49	1.02	3.36	500	6.26	34.26	0.66	3.24	26.96	117.7	1.071
					600	5.64	34.32	0.42	3.38	27.08	106.6	1.183
					700	5.19	34.36	0.46	3.38	27.17	98.9	1.285
					800	4.76	34.41	0.58	3.38	27.26	91.0	1.381
					1000	4.04	34.46	0.84	3.37	27.38	80.5	1.552

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

CREST; July 10, 1949; 0454 GCT; 25°52'N, 122°22'W; sounding, missing; wind, 340°, force 2; weather, cloudy; sea, moderate; wire angle, 9°. 1111

0	19.9	34.19	5.30	0.42	0	19.9	34.19	5.30	0.42	24.19	373.9	0.000
10	19.87	34.16	5.29	0.33	10	19.87	34.16	5.29	0.33	24.17	376.0	0.037
24	19.84	34.18	5.21	0.33	20	19.85	34.16	5.23	0.33	24.18	375.4	0.075
47	18.27	34.11	5.49	0.32	30	19.68	34.17	5.28	0.33	24.23	371.2	0.112
71	17.09	34.07	5.60	0.34	50	18.15	34.11	5.50	0.32	24.57	339.1	0.183
94	16.58	34.04	5.43	0.33	75	17.04	34.06	5.60	0.34	24.80	317.9	0.266
141	15.80	33.97	5.34	0.40	100	16.48	34.03	5.43	0.33	24.91	308.2	0.344
187	11.22	33.55	4.41	1.21	150	14.75	33.94	5.26	0.47	25.23	279.3	0.490
281	8.54	34.04	2.90	2.17	200	10.75	33.55	4.21	1.38	25.71	233.5	0.619
375	7.17	34.13	1.82	2.69	250	9.25	33.91	3.39	1.90	26.25	183.1	0.723
566	5.79	34.31	0.54	3.14	300	8.16	34.06	2.63	2.31	26.53	156.2	0.808
854	4.55	34.43	0.59	3.36	400	6.93	34.15	1.64	2.78	26.78	133.7	0.953
1146	3.62	34.51	0.91	3.33	500	6.19	34.25	0.91	3.03	26.96	117.5	1.079
					600	5.63	34.33	0.54	3.18	27.09	106.0	1.191
					700	5.16	34.38	0.55	3.29	27.19	97.1	1.291
					800	4.76	34.42	0.56	3.35	27.27	90.2	1.386
					1000	4.04	34.47	0.77	3.36	27.38	79.8	1.556

CREST; July 13, 1949; 2151 GCT; 27°39'N, 115°25'W; sounding, missing; wind, missing, force 3; weather, clear; sea, very rough; wire angle, 13°. 1201

0	17.80	33.68	6.04	2.24r	0	17.80	33.68	6.04	(0.35)	24.33	360.6	0.000
9	17.54	-	6.15	0.35	10	17.53	33.74	6.15	0.35	24.44	350.8	0.036
23	14.55	33.78	4.78	0.98	20	15.58	33.78	5.05	0.90	24.93	304.6	0.068
47	11.45	33.77	3.83	1.40	30	13.34	33.78	4.34	1.10	25.40	259.7	0.096
71	10.45	33.82	3.24	1.75	50	11.33	33.77	3.75	1.44	25.78	223.8	0.145
95	10.32	34.04	2.68	2.00	75	10.44	33.84	3.16	1.80	25.99	204.0	0.198
144	11.25	34.45	0.62	2.67	100	10.35	34.10	2.60	2.05	26.21	183.9	0.247
192	10.53	34.43	1.10	2.62	150	11.23	34.45	2.65	2.67	26.32	174.5	0.336
290	9.64	34.54	0.45	2.89	200	10.50	34.43	1.08	2.64	26.44	164.2	0.422
387	8.42	-	0.44	3.00	250	10.08	34.50	0.66	2.78	26.57	153.3	0.501
582	6.41	34.45	0.35	3.26	300	9.52	34.54	0.44	2.91	26.69	141.9	0.574
876	4.52	34.56	0.63	3.36	400	8.29	34.51	0.43	3.01	26.87	126.8	0.708
1173	3.54	-	0.81	3.28	500	7.18	34.46	0.35	3.14	26.99	115.6	0.830
					600	6.29	34.45	0.36	3.28	27.10	105.4	0.940
					700	5.56	34.48	0.49	3.33	27.22	94.9	1.040
					800	4.95	34.53	0.57	3.35	27.33	84.6	1.130
					1000	4.08	(34.57)	0.70	3.34	(27.46)	(73.0)	(1.288)

CREST; July 12, 1949; 1909 GCT; 27°05'N, 115°53'W; sounding, missing; wind, 020°, force 3; weather, partly cloudy; sea, very rough; wire angle, 8°. 1202

0	19.60	33.72	5.10	0.55	0	19.60	33.72	5.10	0.55	23.91	400.8	0.000
9	19.38	33.68	5.47	0.30	10	19.37	33.68	5.46	0.30	23.94	398.6	0.040
24	19.29	33.66	5.30	0.27	20	19.35	33.66	5.31	0.27	23.93	399.5	0.080
48	16.81	33.87	5.90	0.27	30	19.08	33.67	5.40	0.27	24.01	392.5	0.120
72	14.37	33.39	6.15	0.31	50	16.77	33.87	5.95	0.28	24.72	324.8	0.191
96	13.33	33.52	5.79	0.46	75	14.31	33.39	6.14	0.32	24.90	308.4	0.270
144	10.60	33.69	3.62	1.52	100	13.05	33.53	5.72	0.51	25.26	274.2	0.343
190	10.30	34.09	2.00	2.11	150	10.57	33.72	3.30	1.59	25.88	216.8	0.466
284	9.99	34.48	0.90	2.69	200	10.30	34.17	1.82	2.20	26.27	180.0	0.565
378	8.35	34.36	0.60	2.87	250	10.14	34.45	1.17	2.54	26.52	157.9	0.650
567	6.67	34.40	0.29	3.08	300	9.81	34.47	0.85	2.72	26.59	152.0	0.727
854	4.68	34.43	0.50	3.28	400	8.14	34.36	0.55	2.90	26.77	135.5	0.871
1148	3.70	34.51	0.81	3.08	500	7.22	34.38	0.35	3.02	26.92	122.2	1.000
					600	6.40	34.41	0.29	3.11	27.06	110.0	1.116
					700	5.66	34.42	0.33	3.20	27.16	100.8	1.221
					800	5.00	34.43	0.43	3.26	27.25	92.4	1.318
					1000	4.07	34.46	0.67	3.24	27.37	80.8	1.491

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

1203 CREST; July 12, 1949; 1220 GCT; 26°38'N, 116°33'W; sounding, missing; wind, 020°, force 1; weather, partly cloudy sea, rough; wire angle, 13°.

0	19.30	33.51	5.70	1.84r	0	19.30	33.51	5.70	(0.30)	23.83	408.8	0.000
10	19.26	33.68	5.55	0.29	10	19.26	33.68	5.55	0.29	23.97	395.6	0.040
24	19.11	33.68	5.55	0.28	20	19.18	33.68	5.55	0.28	23.99	394.0	0.080
48	16.10	33.59	6.15	0.27	30	19.00	33.67	5.63	0.28	24.03	390.6	0.119
73	14.40	33.48	6.22	0.27	50	15.61	33.58	6.17	0.27	24.77	320.7	0.190
96	13.82	33.48	5.81	0.31	75	14.34	33.48	6.17	0.27	24.96	302.4	0.268
145	11.02	33.57	4.31	1.25	100	13.71	33.48	5.76	0.34	25.09	290.8	0.342
192	10.20	34.02	2.42	2.02	150	10.94	33.60	3.90	1.36	25.72	231.9	0.472
286	9.08	34.34	1.23	2.64	200	10.15	34.07	2.27	2.11	26.22	185.0	0.577
380	7.96	34.36	0.56	2.89	250	9.58	34.28	1.60	2.48	26.48	161.1	0.664
573	6.38	34.38	0.28	3.15	300	8.94	34.35	1.12	2.68	26.64	146.7	0.740
866	4.59	34.47	0.54	3.20	400	7.79	34.36	0.52	2.92	26.82	130.3	0.879
1165	3.70	34.52	0.84	3.16	500	6.95	34.37	0.31	3.08	26.95	118.9	1.003
					600	6.20	34.38	0.31	3.16	27.06	109.6	1.118
					700	5.55	34.41	0.38	3.18	27.16	100.0	1.222
					800	4.94	34.45	0.48	3.19	27.27	90.3	1.318
					1000	4.09	34.50	0.65	3.19	27.40	78.1	1.486

1204 CREST; July 12, 1949; 0658 GCT; 26°15'N, 117°08'W; sounding, missing; wind, 020°, force 3; weather, partly cloudy; sea, rough; wire angle, 5°.

0	19.87	33.91	5.30	0.46	0	19.87	33.91	5.30	0.46	23.98	393.8	0.000
10	19.87	33.78	5.36	0.29	10	19.87	33.78	5.36	0.29	23.88	403.5	0.040
25	19.72	-	5.45	0.29	20	19.79	33.78	5.43	0.29	23.91	401.5	0.080
50	18.15	33.77	5.64	0.29	30	19.62	33.78	5.48	0.29	23.95	397.9	0.120
75	15.44	33.64	5.94	0.34	50	18.15	33.77	5.64	0.29	24.31	363.9	0.196
100	14.29	33.55	6.03	0.36	75	15.44	33.64	5.94	0.34	24.85	313.5	0.281
150	11.24	33.55	4.03	1.30	100	14.29	33.55	6.03	0.36	25.04	296.0	0.357
199	10.32	34.07	2.35	2.05	150	11.24	33.55	4.03	1.30	25.62	240.7	0.491
297	8.86	34.23	1.35	2.55	200	10.31	34.07	2.35	2.07	26.19	187.6	0.599
395	7.82	34.29	0.88	2.86	250	9.50	34.18	1.67	2.36	26.42	167.2	0.687
588	6.23	34.36	0.31	3.10	300	8.84	34.23	1.34	2.56	26.56	154.1	0.767
882	4.54	34.44	0.55	3.19	400	7.80	34.29	0.85	2.87	26.77	135.7	0.912
1180	3.62	34.49	0.94	3.17	500	6.88	34.33	0.40	3.02	26.93	121.0	1.041
					600	6.14	34.37	0.31	3.11	27.06	109.5	1.156
					700	5.54	34.40	0.32	3.16	27.16	100.6	1.261
					800	4.96	34.42	0.44	3.18	27.24	92.8	1.358
					1000	4.09	34.46	0.70	3.18	27.37	81.0	1.531

1205 CREST; July 12, 1949; 0212 GCT; 25°57'N, 117°37'W; sounding, missing; wind, 020°, force 1; weather, partly cloudy; sea, very rough; wire angle, 5°.

0	20.5	34.07	5.70	0.56	0	20.5	34.07	5.70	0.56	23.94	398.5	0.000
10	20.43	34.14	5.78	0.37	10	20.43	34.14	5.78	0.37	24.01	391.2	0.039
24	20.52	34.22	5.58	0.39	20	20.54	34.21	5.64	0.39	24.04	389.3	0.078
49	17.82	33.91	5.90	0.35	30	20.50	34.22	5.64	0.39	24.06	387.7	0.117
74	16.04	33.81	6.20	0.39	50	17.53	33.90	5.94	0.35	24.56	340.1	0.190
98	14.94	33.71	5.90	0.45	75	15.99	33.80	6.20	0.39	24.85	313.5	0.272
148	11.43	33.69	3.79	1.56	100	14.90	33.71	5.87	0.46	25.02	297.7	0.348
198	10.59	34.20	2.22	1.72	150	11.30	33.69	3.63	1.56	25.72	231.5	0.480
297	9.52	34.42	0.84	2.74	200	10.57	34.21	2.10	1.72	26.26	181.6	0.584
397	8.30	34.45	0.51	2.99	250	10.03	34.36	1.29	2.30	26.47	162.6	0.670
596	6.32	34.39	0.32	3.24	300	9.49	34.42	0.82	2.74	26.61	150.4	0.748
894	4.66	34.47	0.48	3.34	400	8.30	34.45	0.51	3.00	26.82	131.4	0.889
1192	3.66	34.51	0.83	3.32	500	7.17	34.43	0.38	3.15	26.97	117.5	1.013
					600	6.29	34.39	0.32	3.24	27.06	109.8	1.127
					700	5.65	34.41	0.32	3.30	27.15	101.4	1.233
					800	5.10	34.44	0.36	3.33	27.24	93.1	1.330
					1000	4.25	34.49	0.58	3.34	27.38	80.8	1.504

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

CREST; July 11, 1949; 2046 GCT; 25°36'N, 118°12'W; sounding, missing; wind, 010°, force 2; weather, cloudy; sea, rough; wire angle, 5°. 1206

0	20.9	34.29	5.21	0.46	0	20.9	34.29	5.21	0.46	24.00	392.3	0.000	
10	20.87	34.25	5.22	0.38	10	20.87	34.25	5.22	0.38	23.98	394.7	0.039	
25	20.81	34.25	5.19	0.34	20	20.85	34.25	5.20	0.35	23.98	394.3	0.079	
50	18.58	33.96	5.74	0.36	30	20.80	34.24	5.38	0.34	23.99	394.1	0.118	
74	16.29	33.82	-	0.40	50	18.58	33.96	5.74	0.36	24.35	360.1	0.194	
98	14.12	33.66	5.79	0.63	75	16.30	33.80	5.79	0.40	24.78	320.3	0.279	
147	11.09	33.77	5.23	1.78	100	13.83	33.66	5.78	0.66	25.21	279.8	0.354	
197	10.20	34.11	3.14	2.21	150	11.05	33.78	5.14	1.81	25.84	220.6	0.479	
295	9.06	-	0.77	2.67	200	10.20	34.12	3.00	2.23	26.25	182.1	0.580	
394	8.01	34.36	0.52	2.94	250	9.57	34.24	1.43	2.49	26.45	163.8	0.667	
592	6.40	34.36	0.40	3.22	300	9.02	34.30	0.75	2.69	26.59	151.7	0.745	
890	4.53	34.43	0.51	3.28	400	7.96	34.36	0.52	2.96	26.80	132.9	0.887	
1189	3.62	34.45	0.77	3.22	500	7.10	34.36	0.45	3.12	26.92	121.8	1.014	
					600	6.33	34.36	0.40	3.22	27.03	112.7	1.132	
					700	5.61	34.39	0.44	3.26	27.14	102.3	1.239	
					800	5.00	34.41	0.49	3.28	27.23	94.1	1.337	
					1000	4.11	34.44	0.63	3.27	27.35	82.8	1.514	

CREST; July 11, 1949; 1451 GCT; 25°07'N, 118°46'W; sounding, missing; wind, 020°, force 2; weather, cloudy; sea, rough; wire angle, 3°. 1207

0	20.6	34.20	5.27	0.55	0	20.6	34.20	5.27	0.55	24.00	392.1	0.000	
10	20.64	34.18	5.22	0.38	10	20.64	34.18	5.22	0.38	23.99	393.7	0.039	
25	20.62	34.16	5.30	0.37	20	20.63	34.17	5.27	0.37	23.98	394.5	0.079	
50	18.84	34.00	5.65	0.40	30	20.50	34.14	5.35	0.37	24.00	393.5	0.118	
75	15.69	33.78	6.22	0.45	50	18.84	34.00	5.65	0.40	24.32	363.4	0.194	
99	13.54	33.62	4.85	0.84	75	15.69	33.78	6.22	0.45	24.90	308.4	0.278	
148	10.76	33.88	2.10	1.77	100	13.53	33.62	4.83	0.84	25.24	277.0	0.351	
198	9.96	34.16	1.99	-	150	10.74	33.90	2.10	1.78	25.99	206.2	0.471	
297	9.16	34.40	1.44	2.82	200	9.93	34.17	1.97	2.33	26.34	173.8	0.567	
397	8.13	34.45	0.88	3.04	250	9.56	34.32	1.74	2.64	26.52	157.8	0.650	
596	6.08	34.38	0.30	3.28	300	9.14	34.40	1.43	2.82	26.65	146.4	0.725	
894	4.44	34.45	0.50	3.30	400	8.07	34.45	0.87	3.04	26.85	127.8	0.862	
1192	3.53	34.54	0.87	3.22	500	6.99	34.41	0.40	3.22	26.98	116.7	0.984	
					600	6.04	34.38	0.30	3.28	27.08	107.4	1.097	
					700	5.39	34.40	0.38	3.30	27.18	98.6	1.200	
					800	4.86	34.42	0.44	3.30	27.25	91.5	1.295	
					1000	4.05	34.48	0.65	3.28	27.39	79.2	1.465	

CREST; July 11, 1949; 0851 GCT; 24°36'N, 119°21'W; sounding, missing; wind, 020°, force 4; weather, cloudy; sea, rough; wire angle, 8°. 1208

0	21.0	34.38	5.18	-	0	21.0	34.38	5.18	-	24.03	389.4	0.000	
10	21.03	34.29	5.14	-	10	21.03	34.29	5.14	-	23.96	395.9	0.039	
24	21.00	34.27	5.34	-	20	20.97	34.27	5.27	-	23.97	395.8	0.080	
49	16.99	33.86	5.90	-	30	20.80	34.26	5.50	-	24.00	392.7	0.118	
73	16.27	33.80	6.06	-	50	16.98	33.86	5.90	-	24.66	330.9	0.191	
97	15.41	33.73	5.91	-	75	16.15	33.79	6.06	-	24.80	317.7	0.272	
146	11.38	33.71	3.45	-	100	15.30	33.73	5.91	-	24.95	304.7	0.350	
195	9.94	34.09	2.50	2.12	150	11.00	33.71	3.40	-	25.79	224.9	0.482	
293	9.19	34.36	0.80	2.80	200	9.93	34.10	2.43	2.19	26.28	179.0	0.583	
390	8.03	34.38	0.48	2.95	250	9.66	34.28	1.31	2.64	26.47	162.4	0.668	
587	6.10	34.36	0.37	3.24	300	9.10	34.36	0.75	2.82	26.62	148.4	0.746	
880	4.56	34.45	0.56	3.24	400	7.94	34.38	0.46	2.97	26.82	131.1	0.885	
1232	3.44	34.56	0.96	3.23	500	6.86	34.36	0.38	3.16	26.96	118.4	1.010	
					600	5.99	34.36	0.37	3.24	27.07	108.2	1.124	
					700	5.40	34.39	0.40	3.24	27.17	99.7	1.227	
					800	4.91	34.43	0.49	3.24	27.26	91.5	1.323	
					1000	4.04	34.49	0.70	3.24	27.40	78.3	1.493	

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

1209 CREST; July 11, 1949; 0245 GCT; 24°10'N, 119°56'W; sounding, missing; wind, 360°, force 3; weather, overcast; sea, rough; wire angle, 0°.

0	20.8	34.25	5.10	0.47	0	20.8	34.25	5.10	0.47	23.99	393.2	0.000
10	20.81	34.23	5.00	0.40	10	20.81	34.23	5.00	0.40	23.98	394.7	0.039
25	20.71	34.22	-	0.39	20	20.73	34.22	5.06	0.39	23.99	393.6	0.079
50	17.80	33.62	5.49	0.42	30	20.50	34.21	5.18	0.39	24.05	388.4	0.118
75	15.92	33.88	5.60	0.43	50	17.80	33.62	5.49	0.42	24.29	366.2	0.193
100	14.49	33.68	5.27	0.59	75	15.92	33.88	5.60	0.43	24.93	306.0	0.277
150	10.64	33.68	3.55	1.58	100	14.49	33.68	5.27	0.59	25.08	291.5	0.352
199	9.98	34.05	2.54	2.05	150	10.64	33.68	3.55	1.58	25.83	221.0	0.480
298	9.22	34.38	0.71	2.79	200	9.97	34.05	2.53	2.06	26.24	183.4	0.582
397	8.14	34.42	0.41	3.03	250	9.61	34.28	1.58	2.48	26.48	161.6	0.668
594	6.29	34.45	0.33	3.24	300	9.20	34.38	0.70	2.80	26.62	148.6	0.745
890	4.56	34.45	0.38	3.33	400	8.09	34.42	0.40	3.03	26.83	130.5	0.884
1188	3.50	34.52	1.24	3.26	500	7.07	34.44	0.36	3.15	26.99	115.5	1.007
					600	6.26	34.45	0.33	3.25	27.11	105.1	1.118
					700	5.63	34.45	0.35	3.30	27.19	98.2	1.219
					800	5.04	34.45	0.37	3.33	27.26	91.6	1.314
					1000	4.10	34.46	0.64	3.32	27.37	81.2	1.487

1210 CREST; July 10, 1949; 2055 GCT; 23°48'N, 120°30'W; sounding, missing; wind, 320°, force 3; weather, cloudy; sea, very rough; wire angle, 12°.

0	20.2	34.04	5.40	0.41	0	20.2	34.04	5.40	0.41	24.01	391.4	0.000
10	20.16	33.95	5.39	0.38	10	20.16	33.95	5.39	0.38	23.94	398.1	0.039
25	20.07	33.87	5.27	0.38	20	20.11	33.88	5.30	0.38	23.90	402.4	0.080
49	17.28	33.89	5.74	0.37	30	19.89	33.87	5.42	0.38	23.95	397.8	0.120
74	16.21	33.84	5.56	0.35	50	17.25	33.89	5.74	0.37	24.62	334.2	0.193
98	15.37	33.75	5.49	0.40	75	16.14	33.83	5.56	0.35	24.84	314.7	0.274
148	13.12	33.60	5.20	0.76	100	15.33	33.74	5.49	0.40	24.95	304.7	0.351
196	10.24	33.93	3.04	1.86	150	12.69	33.60	5.18	0.78	25.39	263.3	0.493
294	9.30	34.33	1.08	2.72	200	10.20	33.97	2.88	1.90	26.14	193.1	0.607
392	7.76	34.33	0.69	3.06	250	9.76	34.27	1.60	2.42	26.44	164.8	0.697
587	6.03	34.37	0.47	3.22	300	9.20	34.33	1.06	2.76	26.58	152.3	0.776
882	4.56	34.45	0.56	3.37	400	7.67	34.33	0.68	3.07	26.82	130.7	0.918
1178	3.62	34.49	0.87	3.20	500	6.63	34.35	0.51	3.16	26.98	116.2	1.041
					600	5.95	34.37	0.47	3.23	27.08	107.0	1.153
					700	5.38	34.40	0.47	3.30	27.18	98.5	1.255
					800	4.90	34.43	0.50	3.35	27.26	91.3	1.350
					1000	4.14	34.47	0.67	3.32	27.37	81.0	1.522

101 BLACK DOUGLAS; August 16, 1949; 0632 GCT; 46°15'N, 125°10'W; sounding, missing; wind, 250°, force 2; weather, rain; sea, moderate; wire angle, 0°.

0	17.15	32.05E	5.78	0.62	0	17.15	32.05	5.78	0.62	23.24	464.8	0.000
11	16.93	32.01	5.83	0.53	10	16.94	32.01	5.84	0.53	23.26	463.1	0.046
27	12.53	32.29	6.96	0.74	20	15.70	32.15	6.86	0.62	23.65	426.5	0.091
55	7.43	32.59	6.51	1.28	30	11.73	32.32	6.95	0.79	24.57	337.0	0.129
82	6.95	32.75	6.21	1.56	50	7.83	32.54	6.55	1.18	25.39	261.1	0.189
110	7.79	33.44	4.07	2.14	75	6.98	32.71	6.30	1.48	25.64	237.0	0.251
164	7.68	33.86	2.52	2.52	100	7.65	33.17	4.65	1.99	25.91	211.9	0.307
216	7.28	33.96	2.03	2.64	150	7.75	33.81	2.78	2.45	26.40	166.4	0.402
322	6.38	34.05	1.50	2.89	200	7.41	33.94	2.15	2.60	26.55	152.7	0.481
426	5.74	34.04	1.26	3.04	250	6.99	34.00	1.80	2.72	26.65	143.7	0.556
632	4.77	34.22	0.45	3.31	300	6.55	34.04	1.56	2.84	26.75	135.3	0.625
1335	2.92	34.51	0.66	3.36	400	5.89	34.04	1.31	3.01	26.83	128.0	0.757
					500	5.35	34.11	0.96	3.15	26.95	117.4	0.880
					600	4.89	34.20	0.49	3.29	27.08	106.3	0.992
					700	4.52	34.27	0.45	3.32	27.17	97.4	1.093
					800	4.18	34.33	0.46	3.33	27.26	90.0	1.187
					1000	3.60	34.42	0.54	3.35	27.39	78.4	1.355

E Evaporation of all salinity samples occurred on Cruise 4908 on stations 101 through 410. Estimated average corrections to values given here can be made by subtracting 0.022‰ from the value of S, 0.015 from σ_t and by adding 1.7 to $10^5\delta$ at all depths; to ΔD add 0.002 for each 100 meter depth increment.

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

BLACK DOUGLAS; August 16, 1949; 0200 GCT; 46°15'N, 125°47'W; sounding, missing; wind, 250°, force 2; weather, cloudy; sea, rough; wire angle, 0°. 102

0	17.53	32.14E	5.81	0.40	0	17.53	32.14	5.81	0.40	23.21	466.5	0.000
11	16.83	32.10	5.75	0.58	10	16.95	32.10	5.75	0.57	23.32	456.6	0.046
26	14.79	32.27	7.68	0.69	20	15.87	32.19	5.82	0.64	23.63	427.0	0.090
52	8.92	32.56	6.61	1.27	30	13.90	32.32	6.02	0.74	24.16	377.6	0.131
78	6.85	32.74	6.26	1.53	50	9.15	32.54	6.61	1.21	25.18	279.4	0.196
104	7.46	33.30	4.54	1.97	75	6.88	32.71	6.36	1.49	25.65	235.7	0.261
154	7.56	33.78	3.07	2.38	100	7.42	33.20	4.70	1.96	25.97	206.5	0.316
205	6.87	33.91	3.01	2.39	150	7.59	33.77	3.10	2.37	26.39	167.2	0.410
306	6.26	33.99	1.88	2.83	200	6.92	33.90	3.02	2.39	26.59	149.1	0.488
406	5.56	34.05	1.33	3.05	250	6.59	33.95	2.50	2.55	26.67	141.7	0.561
611	4.51	34.20	0.57	3.34	300	6.30	33.99	1.93	2.80	26.74	135.7	0.630
1148	3.45	34.43	0.41	3.42	400	5.60	34.05	1.35	3.04	26.87	123.8	0.760
					500	5.00	34.11	0.93	3.19	26.99	113.1	0.879
					600	4.55	34.19	0.60	3.33	27.11	102.8	0.987
					700	4.20	34.27	0.48	3.38	27.21	93.8	1.085
					800	3.95	34.34	0.45	3.40	27.29	86.7	1.175
					1000	3.62	34.40	0.42	3.42	27.37	80.1	1.342

BLACK DOUGLAS; August 15, 1949; 1958 GCT; 46°15'N, 126°44'W; sounding, missing; wind, 270°, force 2; weather, cloudy; sea, moderate; wire angle, missing. 103

0	16.90	32.14E	5.85	0.52	0	16.90	32.14	5.85	0.52	23.36	452.5	0.000
11	16.58	32.16	5.83	-	10	16.58	32.16	5.84	0.53	23.45	444.4	0.045
26	15.29	32.32	6.30	0.55	20	16.02	32.25	6.10	0.54	23.66	425.8	0.088
52	9.26	32.50	6.68	1.13	30	14.40	32.36	6.41	0.56	24.09	384.6	0.129
78	7.19	32.77	6.04	1.55	50	9.87	32.50	6.67	1.09	25.04	293.2	0.197
104	7.77	33.39	4.09	2.06	75	7.20	32.73	6.27	1.50	25.63	238.2	0.263
157	7.72	33.80	2.51	2.47	100	7.72	33.32	4.25	2.00	26.02	201.7	0.318
208	7.27	33.84	2.18	2.51	150	7.77	33.78	2.62	2.46	26.37	169.1	0.411
311	6.36	33.95	2.12	2.75	200	7.38	33.86	2.19	2.50	26.49	158.2	0.492
204p	7.45	33.89	2.18	2.50	250	6.90	33.90	2.18	2.60	26.59	149.7	0.569
449	5.43	34.13	0.86	3.04	300	6.45	33.94	2.14	2.73	26.68	141.2	0.642
1201	3.19	34.36	0.50	3.30	400	5.71	34.06	1.23	2.96	26.87	124.5	0.775
					500	5.15	34.17	0.78	3.08	27.02	110.3	0.892
					600	4.70	34.23	0.69	3.14	27.12	101.6	0.998
					700	4.34	34.28	0.61	3.19	27.20	94.7	1.096
					800	4.05	34.31	0.57	3.23	27.26	89.9	1.189
					1000	3.56	34.35	0.50	3.27	27.34	83.0	1.361

BLACK DOUGLAS; August 15, 1949; 1405 GCT; 46°15'N, 127°41'W; sounding, missing; wind, 290°, force 2; weather, overcast; sea, very rough; wire angle, 25°. 104

0	16.30	31.96E	5.81	0.62	0	16.30	31.96	5.81	0.62	23.37	452.4	0.000
10	16.35	31.91	5.79	0.59	10	16.35	31.91	5.79	0.59	23.32	457.6	0.045
23	16.15	31.98	5.92	0.57	20	16.30	31.96	5.87	0.58	23.37	453.0	0.091
45	9.26	32.50	6.63	1.11	30	15.25	32.07	6.11	0.58	23.69	423.1	0.135
68	8.60	33.19	5.24	1.84	50	8.90	32.75	6.62	1.25	25.39	258.7	0.203
91	8.43	33.48	4.29	2.15	75	8.55	33.30	4.98	1.95	25.88	214.6	0.262
138	8.28	33.75	2.74	2.39	100	8.40	33.55	3.92	2.23	26.10	194.3	0.313
185	8.01	33.93	2.24	2.49	150	8.23	33.80	2.56	2.42	26.32	174.2	0.406
281	7.32	34.00	1.94	2.69	200	7.93	33.95	2.17	2.52	26.48	159.3	0.489
377	6.33	34.00	1.39	2.94	250	7.58	33.99	2.02	2.62	26.56	152.3	0.566
571	5.14	34.14	0.65	3.25	300	7.16	34.00	1.85	2.75	26.63	146.3	0.641
1209	3.08	34.40	0.47	3.51	400	6.16	34.01	1.27	2.98	26.77	133.7	0.781
					500	5.51	34.08	0.85	3.14	26.91	121.6	0.909
					600	5.00	34.16	0.59	3.27	27.03	110.5	1.025
					700	4.58	34.23	0.54	3.33	27.14	101.2	1.131
					800	4.22	34.29	0.51	3.38	27.22	93.5	1.228
					1000	3.60	34.38	0.49	3.46	27.36	81.3	1.403

E See footnote page 168.

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

105 BLACK DOUGLAS; August 15, 1949; 0812 GCT; 46°15'N, 128°38'W; sounding, missing; 250°, force 3; weather, intermittent drizzle; sea, rough; wire angle, 5°.

0	16.28	32.20E	5.82	0.71	0	16.28	32.20	5.82	0.71	23.55	434.8	0.000
12	16.14	33.91r	5.82	0.71	10	16.20	32.22	5.81	0.71	23.59	431.7	0.043
29	15.59	34.33r	6.19	0.77	20	15.97	32.27	5.89	0.73	23.68	423.3	0.086
56	8.92	32.61	6.80	1.29	30	15.53	32.40	6.22	0.77	23.87	404.6	0.128
83	7.23	32.65	6.63	1.44	50	10.23	32.60	6.78	1.23	25.06	291.7	0.197
109	6.82	32.83	6.04	1.62	75	7.53	32.63	6.70	1.40	25.51	250.1	0.265
161	7.04	33.64	3.94	2.24	100	6.85	32.74	6.30	1.54	25.68	233.2	0.325
212	6.52	33.89	3.19	2.43	150	7.02	33.50	4.23	2.14	26.26	179.7	0.429
312	5.75	33.95	2.00	2.86	200	6.68	33.87	3.36	2.39	26.60	148.1	0.510
412	5.08	34.02	1.24	3.17	250	6.23	33.93	2.63	2.59	26.70	138.6	0.581
618	4.47	34.18	0.43	3.42	300	5.85	33.95	2.08	2.81	26.77	132.9	0.650
1289	2.87	34.45	0.56	3.42	400	5.14	34.01	1.32	3.14	26.90	121.1	0.777
					500	4.79	34.08	0.68	3.31	26.99	112.8	0.894
					600	4.53	34.16	0.44	3.41	27.09	104.9	1.003
					700	4.27	34.26	0.43	3.42	27.19	95.4	1.103
					800	4.02	34.34	0.44	3.42	27.28	87.4	1.194
					1000	3.54	34.42	0.47	3.42	27.39	77.7	1.359

106 BLACK DOUGLAS; August 15, 1949; 0215 GCT; 46°15'N, 129°35'W; sounding, missing; wind, 240°, force 3; weather, overcast; sea, very rough; wire angle, 5°.

0	15.83	32.50E	6.01	0.92	0	15.83	32.50	6.01	0.92	23.88	402.7	0.000
10	15.31	32.52	6.01	0.89	10	15.31	32.52	6.01	0.89	24.02	390.8	0.040
25	14.38	32.59	6.30	1.03	20	14.80	32.57	6.10	0.92	24.16	377.0	0.078
50	8.11	32.62	6.90	1.46	30	13.15	32.60	6.45	1.20	24.52	342.4	0.114
75	7.09	32.61	6.75	1.51	50	8.11	32.62	6.90	1.46	25.41	258.4	0.174
99	6.50	32.71	6.67	1.72	75	7.09	32.61	6.75	1.51	25.55	245.7	0.237
149	6.52	33.44	4.85	1.76	100	6.50	32.71	6.66	1.72	25.70	231.1	0.297
199	6.41	33.75	3.87	2.55	150	6.53	33.44	4.83	1.76	26.28	177.6	0.399
299	5.58	33.92	2.43	3.10	200	6.41	33.75	3.84	2.55	26.54	153.6	0.482
399	4.78	33.96	1.59	3.38	250	6.08	33.87	3.06	2.88	26.67	141.2	0.556
535	4.38	34.11	0.72	3.62	300	5.56	33.92	2.42	3.11	26.78	131.7	0.623
962	3.37	-	-	-	400	4.78	33.96	1.58	3.38	26.90	120.5	0.750
					500	4.48	34.07	0.86	3.57	27.02	109.9	0.865
					600	4.23	-	-	-	-	-	-
					700	3.99	-	-	-	-	-	-
					800	3.75	-	-	-	-	-	-
					1000	(3.30)	-	-	-	-	-	-

107 BLACK DOUGLAS; August 14, 1949; 1825 GCT; 46°15'N, 130°44'W; sounding, missing; wind, 250°, force 4; weather, overcast; sea, very rough; wire angle, 7°.

0	15.20	32.63E	5.97	1.08	0	15.20	32.63	5.97	1.08	24.13	380.3	0.000
10	14.94	32.61	6.01	1.03	10	14.94	32.61	6.01	1.03	24.16	376.6	0.038
25	14.90	32.63	6.03	1.03	20	14.91	32.62	6.03	1.03	24.18	375.6	0.076
50	9.04	32.61	6.84	1.01	30	14.71	32.63	6.08	1.03	24.23	371.0	0.113
75	7.19	32.65	6.62	1.54	50	9.04	32.61	6.84	1.01	25.26	272.6	0.117
99	6.67	32.72	6.34	1.75	75	7.19	32.65	6.62	1.54	25.57	244.2	0.242
148	6.64	33.48	4.32	2.43	100	6.65	32.73	6.32	1.75	25.70	231.5	0.301
196	6.10	33.75	4.12	2.49	150	6.62	33.51	4.31	2.44	26.32	173.6	0.403
293	5.42	33.87	2.67	2.95	200	6.08	33.76	4.10	2.50	26.59	148.6	0.483
391	4.81	33.95	1.73	3.32	250	5.71	33.84	3.36	2.70	26.69	139.1	0.555
582	5.03r	34.13	0.76	3.64	300	5.40	33.88	2.59	2.99	26.76	132.8	0.623
1208	3.09	34.45	0.37	3.87	400	4.78	33.96	1.63	3.34	26.90	120.5	0.749
					500	4.36	34.06	1.06	3.55	27.02	109.3	0.864
					600	4.05	34.15	0.70	3.67	27.14	99.3	0.969
					700	3.81	34.24	0.51	3.75	27.23	90.9	1.064
					800	3.61	34.31	0.43	3.80	27.31	84.4	1.151
					1000	3.29	34.42	0.38	3.85	27.42	74.7	1.311

E See footnote page 168.

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

BLACK DOUGLAS; August 14, 1949; 1322 GCT; 46°15'N, 131°30'W; sounding, missing; wind, 250°, force 3; sea, very rough; wire angle, missing. 108

0	15.22	32.65E	6.01	1.32	0	15.22	32.65	6.01	1.32	24.14	378.3	0.000
10	14.69	32.63	6.01	1.09	10	14.69	32.63	6.01	1.09	24.23	370.1	0.038
25	14.70	32.63	6.00	1.03	20	14.71	32.63	6.00	1.04	24.23	370.7	0.074
49	9.88	32.63	6.77	1.45	30	14.69	32.63	6.05	1.03	24.23	370.6	0.112
73	7.84	32.63	6.84	1.59	50	9.68	32.63	6.77	1.46	25.18	281.0	0.177
97	6.81	32.63	6.66	1.70	75	7.75	32.63	6.83	1.60	25.47	253.0	0.243
144	6.42	33.06	5.73	2.07	100	6.78	32.63	6.61	1.72	25.61	240.4	0.305
191	6.68	33.75	3.06	2.85	150	6.44	33.15	5.31	2.20	26.06	198.0	0.415
282	5.74	33.87	3.18	2.88	200	6.64	33.76	3.05	2.86	26.51	155.8	0.503
372	5.30	34.02	2.12	3.47	250	5.98	33.83	3.15	2.86	26.65	142.9	0.577
469	4.79	34.13	0.82	3.74	300	5.65	33.90	3.12	2.93	26.75	134.4	0.647
950	3.41	34.32	0.34	3.92	400	5.16	34.06	1.62	3.60	26.93	117.5	0.773
					500	4.66	34.15	0.71	3.76	27.06	106.1	0.885
					600	4.30	34.19	0.51	3.81	27.13	100.1	0.988
					700	4.00	34.23	0.40	3.84	27.20	94.4	1.085
					800	3.75	34.27	0.36	3.88	27.25	89.6	1.177
					1000	(3.32)	(34.34)	-	-	(27.35)	(81.1)	(1.348)

BLACK DOUGLAS; August 14, 1949; 0700 GCT; 46°15'N, 132°27'W; sounding, missing; wind, 200°, force 4; weather, overcast; sea, rough; wire angle, missing; 109

0	14.99	32.66E	5.99	1.10	0	14.99	32.66	5.99	1.10	24.19	373.6	0.000
9	14.86	32.85	5.99	0.99	10	14.85	32.85	5.99	0.99	24.36	357.2	0.037
23	14.87	32.65	6.01	1.00	20	14.86	32.66	6.01	0.99	24.22	371.6	0.073
46	11.00	32.61	6.63	1.26	30	14.77	32.62	6.06	1.02	24.21	373.0	0.110
70	8.02	32.63	6.66	1.53	50	10.50	32.61	6.65	1.32	25.02	295.5	0.177
94	6.86	32.68	6.54	1.63	75	7.47	32.64	6.65	1.56	25.51	248.6	0.245
140	6.84	33.37	5.30	2.11	100	6.84	32.72	6.48	1.68	25.67	234.7	0.305
187	7.07	33.80	3.34	2.67	150	6.88	33.53	4.91	2.22	26.30	175.5	0.408
281	6.24	33.87	2.84	2.94	200	7.03	33.82	3.21	2.72	26.51	156.6	0.491
375	5.53	33.98	2.19	3.25	250	6.53	33.85	2.99	2.86	26.60	148.4	0.567
562	4.37	34.05	1.24	3.52	300	6.10	33.89	2.69	3.01	26.69	140.5	0.639
1250	2.96	34.45	0.50	3.88	400	5.34	33.99	2.04	3.30	26.86	125.0	0.772
					500	4.69	34.03	1.49	3.46	26.97	115.2	0.892
					600	4.25	34.07	1.10	3.56	27.04	108.4	1.004
					700	3.95	34.13	0.85	3.63	27.12	101.3	1.109
					800	3.70	34.20	0.72	3.69	27.20	94.2	1.207
					1000	3.30	34.34	0.59	3.79	27.35	80.8	1.382

BLACK DOUGLAS; August 13, 1949; 1923 GCT; 46°15'N, 133°24'W; sounding, missing; wind, 320°, force 4; weather, overcast; sea, very rough; wire angle, 5°. 110

0	15.70	32.70E	5.88	0.90	0	15.70	32.70	5.88	0.90	24.07	385.9	0.000
10	15.24	32.66	5.90	0.84	10	15.24	32.66	5.90	0.84	24.14	379.2	0.038
26	15.23	32.66	5.94	0.85	20	15.23	32.66	5.93	0.84	24.14	378.8	0.076
51	11.93	32.59	6.68	1.07	30	15.16	32.65	6.00	0.87	24.15	378.8	0.114
77	8.56	32.59	6.61	1.43	50	12.10	32.59	6.67	1.07	24.71	324.4	0.174
102	7.32	32.79	6.93	1.67	75	8.80	32.58	6.62	1.41	25.28	271.9	0.249
154	7.04	33.66	3.98	2.32	100	7.37	32.77	6.92	1.65	25.64	237.8	0.313
206	6.61	33.91	3.36	2.56	150	7.08	33.60	4.09	2.27	26.33	172.9	0.416
312	5.75	33.98	2.08	3.01	200	6.67	33.90	3.41	2.54	26.62	145.7	0.495
415	4.86	34.00	1.55	3.25	250	6.25	33.96	2.77	2.74	26.72	136.6	0.566
615	4.12	34.17	0.58	3.64	300	5.84	33.98	2.17	2.97	26.79	130.6	0.632
1296	2.83	34.49	0.54	3.71	400	4.95	33.99	1.62	3.22	26.90	120.3	0.758
					500	4.50	34.06	1.07	3.45	27.01	110.9	0.873
					600	4.18	34.16	0.59	3.63	27.12	101.0	0.979
					700	3.90	34.23	0.56	3.65	27.21	93.3	1.076
					800	3.65	34.29	0.55	3.67	27.28	87.0	1.166
					1000	3.25	34.39	0.54	3.69	27.40	76.6	1.330

E See footnote page 168.

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
201	BLACK DOUGLAS; August 10, 1949; 1325 GCT; 44°23'N, 125°15'W; sounding, missing; wind, 340°, force 1; weather, cloudy; sea, slight; wire angle, 10°.											
0	15.00	32.21E	6.48	0.63	0	15.00	32.21	6.48	0.63	23.85	406.8	0.000
10	14.64	32.23	6.51	0.60	10	14.64	32.23	6.51	0.60	23.94	398.5	0.040
25	11.49	32.36	6.23	1.09	20	12.35	32.30	6.41	0.93	24.44	349.6	0.078
50	8.52	32.92	5.38	1.76	30	10.68	32.50	6.10	1.24	24.91	306.0	0.110
75	8.12	33.26	4.58	2.07	50	8.52	32.92	5.38	1.76	25.59	241.9	0.165
100	7.96	33.62	3.48	2.33	75	8.12	33.26	4.58	2.07	25.91	211.4	0.222
150	7.40	33.87	2.72	2.57	100	7.96	33.62	3.48	2.33	26.22	182.8	0.271
200	6.82	33.95	2.43	2.60	150	7.40	33.87	2.72	2.57	26.50	157.1	0.356
300	6.32	34.07	1.39	3.05	200	6.82	33.95	2.43	2.60	26.64	144.2	0.432
400	5.66	34.11	1.00	3.20	250	6.56	34.02	1.92	2.79	26.73	136.0	0.502
600	4.88	34.23	0.43	3.36	300	6.32	34.07	1.39	3.05	26.80	130.0	0.568
1250	3.07	34.49	0.66	3.52	400	5.66	34.11	1.00	3.20	26.91	120.1	0.693
					500	5.25	34.16	0.69	3.30	27.00	112.4	0.809
					600	4.88	34.23	0.43	3.36	27.10	103.9	0.918
					700	4.56	34.30	0.43	3.41	27.19	95.6	1.017
					800	4.25	34.35	0.43	3.44	27.27	89.2	1.110
					1000	3.69	34.43	0.49	3.49	27.39	78.6	1.278
202	BLACK DOUGLAS; August 10, 1949; 1802 GCT; 44°20'N, 125°50'W; sounding, missing; wind, 280°, force 1; weather, overcast; sea, moderate; wire angle, 5°.											
0	15.72	31.98E	6.11	0.62	0	15.72	31.98	6.11	0.62	23.51	438.6	0.000
9	15.50	31.94	6.14	0.56	10	15.50	31.94	6.15	0.56	23.52	437.3	0.044
24	11.64	32.36	6.53	1.03	20	13.10	32.27	6.50	0.91	24.29	365.6	0.084
49	7.84	32.72	5.38	1.89	30	11.19	32.46	6.50	1.22	24.78	317.7	0.118
74	7.80	33.24	4.17	2.29	50	7.84	32.74	5.37	1.89	25.54	245.9	0.174
98	7.96	33.57	3.37	2.44	75	7.80	33.24	4.13	2.29	25.94	208.4	0.231
148	7.34	33.89	2.76	2.65	100	7.95	33.59	3.34	2.45	26.20	184.9	0.280
198	6.76	33.95	2.54	2.75	150	7.30	33.90	2.74	2.66	26.54	153.3	0.365
298	5.86	34.00	1.84	3.00	200	6.74	33.95	2.53	2.75	26.65	142.9	0.439
398	5.25	34.01	1.24	3.27	250	6.25	33.98	2.18	2.87	26.74	135.0	0.509
597	4.79	34.20	0.47	3.56	300	5.83	34.00	1.82	3.00	26.81	128.9	0.574
1245	3.10	34.45	0.55	3.59	400	5.25	34.01	1.22	3.28	26.88	122.4	0.700
					500	5.04	34.09	0.72	3.49	26.97	115.0	0.818
					600	4.77	34.21	0.46	3.56	27.10	104.0	0.928
					700	4.45	34.31	0.45	3.56	27.21	93.6	1.027
					800	4.13	34.38	0.46	3.57	27.30	85.7	1.117
					1000	3.60	34.43	0.47	3.58	27.40	77.6	1.280
203	BLACK DOUGLAS; August 11, 1949; 0035 GCT; 44°17'N, 126°46'W; sounding, missing; wind, 270°, force 2; weather, overcast; sea, very rough; wire angle, missing.											
0	17.10	31.38E	5.84	0.82	0	17.10	31.38	5.84	0.82	22.74	512.4	0.000
10	16.52	31.39	5.87	0.48	10	16.52	31.39	5.87	0.48	22.88	499.1	0.051
23	14.37	32.45	6.53	0.69	20	15.00	32.20	6.50	0.65	23.84	408.0	0.096
47	11.68	32.65	6.69	0.91	30	13.78	32.50	6.63	0.74	24.32	362.1	0.134
71	9.05	32.74	6.32	1.25	50	11.22	32.65	6.68	0.95	24.93	304.5	0.201
94	7.84	32.92	5.84	1.51	75	8.75	32.76	6.27	1.29	25.43	257.7	0.271
142	7.34	33.51	4.22	2.22	100	7.77	32.99	5.50	1.60	25.75	226.7	0.332
188	6.94	33.82	3.98	2.16r	150	7.28	33.59	4.16	2.25	26.29	176.3	0.433
283	5.81	33.87	2.98	2.60	200	6.83	33.83	3.88	2.35	26.54	153.2	0.515
377	7.09r	33.98	1.56	3.12	250	6.17	33.85	3.38	2.48	26.65	143.7	0.589
378	5.48	34.14r	0.59r	3.42r	300	5.75	33.89	2.72	2.69	26.73	136.2	0.659
1105	3.23	34.45	0.57	3.45	400	5.38	34.00	1.32	3.19	26.86	124.7	0.790
					500	4.95	34.09	0.95	3.37	26.98	113.9	0.909
					600	4.55	34.17	0.81	3.42	27.09	104.4	1.018
					700	4.20	34.25	0.70	3.44	27.19	95.3	1.118
					800	3.90	34.32	0.61	3.45	27.28	87.5	1.209
					1000	3.44	34.42	0.57	3.45	27.40	76.4	1.373

E See footnote page 168.

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

BLACK DOUGLAS; August 11, 1949; 0722 GCT; 44°14'N, 127°42'W; sounding, missing; wind, 200°, force 4; weather, intermittent drizzle; sea, rough; wire angle, 7°. 204

0	16.92	31.20E	5.75	0.56	0	16.92	31.20	5.75	0.56	22.65	521.6	0.000
10	16.76	31.22	5.82	0.41	10	16.76	31.22	5.82	0.41	22.70	516.8	0.052
25	15.11	32.03	6.41	0.53	20	16.20	31.81	6.22	0.46	23.27	461.8	0.101
49	10.16	32.57	6.58	1.09	30	14.20	32.17	6.49	0.63	23.99	394.4	0.144
74	8.14	32.66	6.56	1.20	50	10.10	32.58	6.58	1.09	25.07	291.2	0.212
98	6.90	32.68	6.43	1.38	75	8.07	32.66	6.56	1.21	25.45	255.3	0.280
148	6.96	33.57	4.39	1.99	100	6.89	32.69	6.41	1.39	25.63	237.6	0.342
197	6.97	33.87	3.29	2.24	150	6.95	33.59	4.29	2.01	26.34	171.9	0.445
297	6.17	34.00	2.06	2.69	200	6.95	33.87	3.23	2.26	26.56	151.8	0.525
422	5.40	34.14	0.69	3.07	250	6.55	33.94	2.67	2.49	26.67	141.9	0.598
1121	3.25	34.43	0.52	3.60	300	6.16	34.00	2.00	2.70	26.77	133.1	0.668
					400	5.52	34.12	0.82	3.03	26.94	117.6	0.793
					500	5.00	34.17	0.57	3.20	27.04	108.5	0.906
					600	4.60	34.21	0.56	3.32	27.12	102.0	1.011
					700	4.26	34.25	0.55	3.39	27.18	95.9	1.110
					800	3.96	34.31	0.54	3.45	27.26	88.9	1.203
					1000	3.48	34.39	0.52	3.55	27.38	79.1	1.370

BLACK DOUGLAS; August 11, 1949; 1505 GCT; 44°13'N, 128°37'W; sounding, missing; wind, 320°, force 2; weather, overcast; sea, very rough; wire angle, 10°. 205

0	16.10	32.09E	5.70	0.60	0	16.10	32.09	5.70	0.60	23.51	438.9	0.000
10	16.31	32.09	5.77	0.60	10	16.31	32.09	5.77	0.60	23.46	443.6	0.044
25	15.89	32.54	5.94	0.63	20	16.16	32.52	5.87	0.61	23.84	409.1	0.087
49	10.99	32.61	6.86	1.06	30	15.55	32.55	6.10	0.67	23.98	394.3	0.127
74	8.46	32.70	6.71	1.30	50	10.85	32.62	6.86	1.07	24.97	300.7	0.196
99	7.77	32.68	6.61	1.37	75	8.42	32.70	6.70	1.30	25.43	257.1	0.266
147	7.27	33.17	5.44	1.84	100	7.75	32.68	6.61	1.37	25.51	249.7	0.330
196	7.14	33.75	4.14	2.25	150	7.27	33.21	5.33	1.88	26.00	204.4	0.443
294	6.28	33.91	2.92	2.66	200	7.13	33.76	4.08	2.27	26.45	162.3	0.535
342	5.83	33.96	1.88	3.15	250	6.75	33.85	3.57	2.49	26.57	151.3	0.613
560	4.90	34.16	0.61	3.45	300	6.22	33.92	2.81	2.70	26.70	139.8	0.686
1170	3.15	34.47	0.46	3.69	400	5.53	34.01	1.31	3.29	26.85	125.8	0.818
					500	5.13	34.10	0.80	3.40	26.97	115.3	0.940
					600	4.75	34.20	0.54	3.48	27.09	104.5	1.049
					700	4.38	34.30	0.50	3.53	27.21	93.5	1.148
					800	4.05	34.36	0.49	3.57	27.30	86.2	1.238
					1000	3.50	34.43	0.47	3.64	27.41	76.4	1.401

BLACK DOUGLAS; August 11, 1949; 2115 GCT; 44°09'N, 129°33'W; sounding, missing; wind, 290°, force 2; weather, cloudy; sea, rough; wire angle, 10°. 206

0	16.35	32.58E	5.86	0.71	0	16.35	32.58	5.86	0.71	23.83	408.4	0.000
9	16.24	32.52	5.79	0.71	10	16.23	32.52	5.79	0.71	23.81	410.4	0.041
23	15.93	32.60	5.85	0.68	20	16.00	32.58	5.83	0.68	23.91	401.3	0.082
47	14.12	32.68	6.34	0.82	30	15.67	32.64	5.93	0.69	24.03	390.3	0.121
71	9.98	32.72	6.78	1.14	50	13.81	32.68	6.49	0.87	24.46	349.8	0.195
94	8.21	32.66	6.54	1.38	75	9.48	32.72	6.77	1.17	25.28	271.5	0.273
142	7.52	33.33	5.05	1.99	100	8.05	32.66	6.29	1.43	25.45	255.4	0.339
190	7.11	33.75	4.26	2.28	150	7.46	33.44	4.88	2.05	26.15	190.0	0.450
283	6.26	33.89	3.23	2.74	200	7.02	33.78	4.14	2.33	26.48	159.4	0.537
379	5.30	33.96	1.95	3.25	250	6.56	33.86	3.62	2.57	26.60	147.9	0.614
570	4.36	34.07	0.79	3.72	300	6.10	33.91	3.00	2.83	26.70	139.0	0.686
1189	3.13	34.42	0.53	3.90	400	5.16	33.97	1.75	3.34	26.86	124.3	0.817
					500	4.64	34.03	1.09	3.63	26.97	114.8	0.937
					600	4.27	34.09	0.70	3.74	27.06	107.0	1.048
					700	3.99	34.18	0.61	3.78	27.16	98.1	1.150
					800	3.76	34.27	0.59	3.82	27.25	89.7	1.245
					1000	3.39	34.37	0.56	3.87	27.37	79.6	1.414

E See footnote page 168.

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^{-5}cm^3/g$	dyn. m

207 BLACK DOUGLAS; August 12, 1949; 0415 GCT; 44°06'N, 130°29'W; sounding, missing; wind, 290°, force 2; weather, overcast; sea, very rough; wire angle, 5°.

0	16.25	32.66E	5.94	0.81	0	16.25	32.66	5.94	0.81	23.91	400.4	0.000
10	15.91	32.66	5.94	0.78	10	15.91	32.66	5.94	0.78	23.99	393.2	0.040
25	15.82	32.66	5.92	0.69	20	15.85	32.66	5.92	0.71	24.00	392.4	0.079
50	9.70	32.68	6.90	1.25	30	15.75	32.66	5.95	0.70	24.03	390.5	0.118
76	8.40	32.72	6.72	1.35	50	9.70	32.68	6.90	1.25	25.21	277.6	0.185
101	7.54	32.72	6.69	1.40	75	8.42	32.72	6.72	1.35	25.45	255.8	0.252
152	7.00	33.06	5.82	1.69	100	7.56	32.72	6.70	1.40	25.57	244.1	0.314
204	6.86	33.69	4.89	1.90	150	7.02	33.04	5.86	1.68	25.90	213.9	0.429
308	5.84	33.91	2.93	2.56	200	6.87	33.67	4.93	1.88	26.41	165.6	0.524
408	5.21	34.00	1.55	3.06	250	6.45	33.81	4.00	2.20	26.58	150.3	0.602
608	4.44	34.18	0.56	3.33	300	5.93	33.90	3.07	2.51	26.72	137.6	0.675
1266	2.84	34.47	0.56	3.32	400	5.25	33.99	1.64	3.03	26.87	123.9	0.805
					500	4.82	34.08	0.86	3.27	26.99	113.2	0.924
					600	4.47	34.18	0.56	3.33	27.11	102.6	1.032
					700	4.15	34.24	0.55	3.33	27.19	95.3	1.131
					800	3.86	34.30	0.55	3.33	27.27	88.5	1.223
					1000	3.39	34.39	0.56	3.32	27.39	78.0	1.389

208 BLACK DOUGLAS; August 12, 1949; 1030 GCT; 44°04'N, 131°20'W; sounding, missing; wind, 340°, force 2; weather, overcast; sea, moderate; wire angle, 10°.

0	16.06	32.70E	5.92	0.80	0	16.06	32.70	5.92	0.80	23.99	393.2	0.000
11	15.86	32.63	5.91	0.80	10	15.87	32.63	5.91	0.80	23.97	394.6	0.039
27	15.67	32.63	5.94	0.81	20	15.75	32.62	5.92	0.81	24.00	393.1	0.079
54	10.20	32.70	6.83	1.22	30	15.63	32.63	5.99	0.85	24.03	390.1	0.118
79	8.78	32.77	6.52	1.41	50	11.40	32.69	6.82	1.18	24.92	304.6	0.187
105	8.06	32.74	6.40	1.50	75	8.90	32.77	6.58	1.39	25.41	259.1	0.258
154	7.02	33.19	5.72	1.89	100	8.20	32.74	6.41	1.48	25.49	251.5	0.321
204	7.01	33.69	4.91	2.03	150	7.05	33.15	5.77	1.88	25.98	206.0	0.437
290p	6.06	33.89	2.42	3.00	200	7.03	33.68	4.96	2.02	26.40	167.0	0.529
523p	4.47	34.11	0.77	3.57	250	6.49	33.82	3.56	2.52	26.58	150.0	0.608
1223p	2.92	34.47	0.49	3.70	300	5.94	33.90	2.18	3.07	26.72	137.7	0.681
					400	5.14	34.02	1.21	3.41	26.91	120.3	0.810
					500	4.57	34.10	0.82	3.55	27.03	108.7	0.924
					600	4.18	34.17	0.73	3.61	27.13	100.1	1.029
					700	3.88	34.23	0.69	3.65	27.21	93.1	1.125
					800	3.63	34.29	0.66	3.66	27.28	86.8	1.215
					1000	3.23	34.39	0.59	3.69	27.40	76.3	1.378

209 BLACK DOUGLAS; August 12, 1949; 1722 GCT; 44°01'N, 132°20'W; sounding, missing; wind, 340°, force 1; weather, overcast; sea, moderate; wire angle, 10°.

0	16.20	32.63E	5.91	0.84	0	16.20	32.63	5.91	0.84	23.90	401.5	0.000
10	15.98	32.61	5.88	0.79	10	15.98	32.61	5.88	0.79	23.93	398.6	0.040
25	15.99	32.59	5.81	0.83	20	15.99	32.60	5.82	0.81	23.92	399.6	0.080
49	11.46	32.63	6.67	1.27	30	15.93	32.59	5.83	0.86	23.92	399.3	0.120
74	9.06	32.66	6.67	1.37	50	11.25	32.63	6.67	1.28	24.91	306.5	0.190
98	8.36	32.74	6.39	1.42	75	9.07	32.66	6.67	1.37	25.30	269.9	0.262
148	7.05	33.19	5.76	1.74	100	8.33	32.75	6.37	1.43	25.48	252.7	0.328
196	6.94	33.75	4.68	1.99	150	7.05	33.25	5.71	1.75	26.06	198.6	0.441
293	6.12	33.91	3.42	2.42	200	6.93	33.77	4.59	2.01	26.48	159.0	0.530
389	5.00	33.95	2.04	2.90	250	6.57	33.87	3.97	2.22	26.61	147.3	0.606
582	4.04	34.07	0.89	3.34	300	6.03	33.91	3.30	2.46	26.71	138.2	0.678
1222	2.86	34.45	0.43	3.40	400	4.92	33.95	1.92	2.94	26.88	123.0	0.809
					500	4.35	34.00	1.20	3.22	26.98	113.6	0.927
					600	4.00	34.09	0.85	3.35	27.08	104.1	1.036
					700	3.71	34.18	0.71	3.37	27.18	95.1	1.135
					800	3.49	34.25	0.61	3.38	27.26	88.0	1.227
					1000	3.13	34.37	0.50	3.39	27.39	76.6	1.391

E See footnote page 168.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

BLACK DOUGLAS; August 13, 1949; 0000 GCT; 43°58'N, 133°15'W; sounding, missing; wind, 290°, force 1; weather, overcast; sea, slight; wire angle, missing. 210

0	16.15	32.70E	5.90	1.19	0	16.15	32.70	5.90	1.19	23.97	395.1	0.000
10	15.69	32.68	-	1.04	10	15.69	32.68	5.88	1.04	24.06	387.3	0.039
25	15.64	32.59	5.86	1.06	20	15.67	32.61	5.85	1.05	24.01	392.2	0.078
50	10.46	32.77	6.69	1.24	30	15.60	32.59	5.89	1.09	24.00	392.3	0.117
75	8.76	32.72	6.78	1.48	50	10.46	32.77	6.69	1.24	25.16	283.0	0.185
100	7.65	32.75	6.66	1.65	75	8.76	32.72	6.78	1.48	25.39	260.7	0.253
148	6.79	32.97	6.14	1.95	100	7.65	32.75	6.66	1.65	25.58	243.2	0.316
196	7.03	33.64	5.34	1.94	150	6.80	32.98	6.10	1.96	25.88	215.3	0.431
292	6.10	33.93	3.80	2.54	200	7.02	33.67	5.27	1.95	26.39	167.6	0.526
388	5.15	33.91	2.46	3.02	250	6.58	33.85	4.49	2.27	26.59	149.0	0.605
428u	5.18r	34.11r	1.28r	3.49r	300	6.01	33.94	3.67	2.59	26.74	135.7	0.677
1123	3.06	34.45	0.47	3.76	400	5.07	33.92	2.34	3.07	26.84	126.9	0.808
					500	4.50	34.00	1.56	3.35	26.96	115.6	0.929
					600	4.06	34.11	1.15	3.46	27.10	103.2	1.039
					700	3.75	34.20	0.89	3.54	27.20	94.0	1.137
					800	3.55	34.27	0.73	3.60	27.27	87.3	1.228
					1000	3.21	34.40	0.55	3.70	27.41	75.4	1.390

BLACK DOUGLAS; August 9, 1949; 2040 GCT; 42°43'N, 125°14'W; sounding, missing; wind, 360°, force 4; weather, partly cloudy; sea, very rough; wire angle, 12°. 301

0	13.05	33.57E	6.16	1.48	0	13.05	33.57	6.16	1.48	25.30	268.9	0.000
10	12.80	33.64	6.18	1.43	10	12.80	33.64	6.18	1.43	25.40	259.1	0.026
24	9.90	33.66	5.12	1.75	20	10.30	33.65	5.78	1.61	25.87	214.8	0.050
49	8.55	33.77	3.66	2.28	30	9.38	33.69	4.73	1.97	26.05	197.6	0.071
73	8.11	33.84	2.99	2.38	50	8.53	33.77	3.67	2.28	26.25	178.9	0.108
97	7.89	-	2.59	2.44	75	8.10	33.84	2.96	2.38	26.37	168.0	0.152
145	7.65	34.00r	2.03	2.45	100	7.87	33.86	2.54	2.45	26.42	163.6	0.193
190	7.25	33.91	1.89	2.61	150	7.58	33.89	2.00	2.45	26.49	158.0	0.273
279	6.80	34.00	1.56	2.86	200	7.18	33.92	1.86	2.66	26.57	151.0	0.351
367	6.16	34.05	1.18	3.02	250	6.94	33.98	1.67	2.80	26.65	144.2	0.424
545	5.32	34.18	0.55	3.29	300	6.64	34.01	1.46	2.90	26.71	138.6	0.495
1026	3.59	34.45	0.57	3.32	400	5.99	34.07	1.04	3.08	26.84	127.0	0.628
					500	5.51	34.14	0.64	3.24	26.96	117.2	0.750
					600	5.08	34.23	0.56	3.30	27.08	106.1	0.862
					700	4.69	34.35	0.55	3.31	27.22	93.5	0.962
					800	4.32	34.41	0.55	3.32	27.30	85.7	1.051
					1000	3.67	34.45	0.56	3.32	27.40	76.9	1.214

BLACK DOUGLAS; August 9, 1949; 1355, 1255 GCT; 42°35'N, 125°54'W; sounding, missing; wind, 360°, force 4; weather, partly cloudy; sea, rough; wire angle, 45°, 35°. 302

0	13.10	-	6.40	0.95	0	13.10	(32.56)	6.40	0.95	(24.50)	(343.8)	0.000
9	13.25	32.65E	6.33	0.86	10	13.25	32.65	6.32	0.86	24.54	340.3	(0.034)
23	9.83	32.95	6.09	1.37	20	10.35	32.89	6.15	1.09	25.27	271.8	0.065
46	8.26	33.39	4.59	1.91	30	8.75	33.09	5.60	1.55	25.68	232.4	0.090
70	8.00[a]	33.58	3.64	2.18	50	8.18	33.44	4.39	1.96	26.04	198.5	0.133
93	7.84	33.77	3.16	2.38	75	7.96	33.62	3.48	2.24	26.22	182.4	0.181
142	7.20	33.87	2.70	2.48	100	7.77	33.79	3.09	2.40	26.38	167.5	0.224
191	6.86	33.98	2.06	2.66	150	7.14	33.89	2.60	2.49	26.55	152.1	0.304
					200	6.80	33.99	1.95	2.71	26.67	141.0	0.378
294	5.97	34.04	1.19	3.09	250	6.30	34.03	1.44	2.95	26.77	132.0	0.445
391	5.75	34.14	0.91	3.22	300	5.97	34.05	1.17	3.10	26.83	127.0	0.511
574	4.98	34.23	0.54	3.35	400	5.70	34.15	0.89	3.22	26.94	117.6	0.633
830	4.17	34.36	0.35	3.50	500	5.25	34.20	0.67	3.27	27.03	109.8	0.747
1229	3.04	34.37r	0.71	3.42	600	4.87	34.24	0.53	3.37	27.09	104.6	0.854
					700	4.55	34.29	0.42	3.45	27.16	98.7	0.955
					800	4.24	34.35	0.36	3.49	27.24	91.9	1.051
					1000	3.64	(34.43)	0.43	3.49	(27.32)	(84.5)	(1.227)

a) Middle thermometer reading of 7.87° rejected.

E See footnote page 168.

SIO

CCOFI

4908

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

303 BLACK DOUGLAS; August 9, 1949; 0248 GCT; 42°30'N, 126°48'W; sounding, missing; wind, 360°, force 4; weather, cloudy; sea, rough; wire angle, 10°.

0	15.99	31.91E	6.02	0.59	0	15.99	31.91	6.02	0.59	23.40	449.7	0.000
10	15.77	31.94	6.09	0.49	10	15.77	31.94	6.09	0.49	23.47	443.1	0.045
26	15.11	31.91	6.12	0.51	20	15.40	31.92	6.12	0.49	23.54	437.0	0.089
52	10.33	32.54	6.50	0.81	30	14.76	31.91	6.16	0.53	23.67	424.7	0.132
77	7.88	32.94	6.37	1.26	50	10.65	32.51	6.50	0.77	24.92	305.3	0.205
103	7.56	32.97	5.53	1.66	75	7.94	32.93	6.38	1.22	25.68	233.5	0.272
152	7.34	33.75	3.58	2.34	100	7.58	32.97	5.75	1.58	25.76	225.8	0.329
201	7.16	33.93	2.65	2.58	150	7.35	33.73	3.67	2.34	26.39	166.7	0.428
297	6.34	33.95	1.63	2.99	200	7.18	33.93	2.67	2.58	26.57	150.3	0.507
394	5.76	34.09	0.99	3.28	250	6.79	33.95	2.04	2.80	26.64	144.5	0.580
589	4.61	34.23	0.50	3.61	300	6.32	33.95	1.60	3.00	26.71	138.9	0.651
1139	3.31	34.45	0.56	3.64	400	5.71	34.10	0.96	3.30	26.90	121.5	0.782
					500	5.03	34.18	0.61	3.51	27.05	108.2	0.896
					600	4.58	34.24	0.50	3.60	27.14	99.5	1.000
					700	4.28	34.29	0.50	3.61	27.21	93.2	1.096
					800	4.01	34.33	0.50	3.61	27.28	87.9	1.187
					1000	3.57	34.41	0.56	3.63	27.38	78.7	1.353

304 BLACK DOUGLAS; August 8, 1949; 1810 GCT; 42°24'N, 127°50'W; sounding, 1500 fm; wind, 340°, force 3; weather, cloudy; sea, moderate; wire angle, 32°.

0	16.35	32.18E	5.91	0.69	0	16.35	32.18	5.91	0.69	23.53	437.6	0.000
10	16.20	32.36	5.92	0.59	10	16.20	32.36	5.92	0.59	23.69	421.4	0.043
25	11.92	32.70	6.34	0.76	20	14.75	32.59	6.30	0.70	24.18	374.5	0.083
49	9.29	33.08	5.50	1.59	30	11.27	32.79	6.33	0.85	25.03	294.5	0.116
71	8.38	33.48	4.32	2.15	50	9.14	33.10	5.40	1.61	25.63	237.8	0.170
91	7.70	33.58	4.20	2.16	75	8.25	33.51	4.29	2.16	26.09	194.7	0.223
130	7.08	33.82	3.94	2.21	100	7.49	33.64	4.14	2.17	26.30	174.7	0.270
167	7.14	33.95	2.42	2.70	150	7.10	33.90	2.95	2.57	26.56	150.8	0.351
246	6.86[a]	34.05	1.62	2.91	200	7.15	34.01	2.03	2.80	26.64	143.9	0.425
324	6.12	34.07	1.16	3.08	250	6.84	34.05	1.60	2.92	26.71	137.8	0.495
584u	4.83	34.20	0.57	3.38	300	6.36	34.06	1.28	3.03	26.79	131.2	0.562
1150	3.11	34.52	0.58	3.46	400	5.61	34.10	0.85	3.22	26.91	120.2	0.687
					500	5.15	34.17	0.62	3.34	27.02	110.2	0.803
					600	4.76	34.21	0.57	3.39	27.10	103.8	0.911
					700	4.41	34.28	0.57	3.42	27.19	95.5	1.010
					800	4.09	34.34	0.57	3.43	27.28	88.2	1.102
					1000	3.50	34.45	0.57	3.46	27.42	74.9	1.265

305 BLACK DOUGLAS; August 8, 1949; 1428 GCT; 42°21'N, 128°35'W; sounding, 1800 fm; wind, 330°, force 2; weather, precipitation within sight; sea, moderate; wire angle, 14°.

0	16.90	31.80E	5.76	0.60	0	16.90	31.80	5.76	0.60	23.10	477.5	0.000
10	16.69	31.78	5.79	0.67	10	16.69	31.78	5.79	0.67	23.14	474.5	0.048
25	14.77	32.70	6.11	0.84	20	15.95	32.67	5.95	0.78	23.99	393.7	0.091
50	11.99	32.69	6.54	0.86	30	13.67	32.72	6.25	0.85	24.51	343.8	0.128
75	8.70	32.99	5.95	1.49	50	11.99	32.69	6.54	0.86	24.90	307.8	0.193
99	8.61	33.15	5.30	1.77	75	8.70	32.99	5.95	1.49	25.61	239.8	0.262
148	8.02	33.69	3.68	2.47	100	8.60	33.15	5.29	1.78	25.76	226.7	0.320
196	7.64	33.89	2.76	2.73	150	7.99	33.70	3.66	2.49	26.28	178.1	0.421
290	6.88	34.05	2.36	2.96	200	7.62	33.90	2.71	2.74	26.49	158.6	0.505
386	6.04	34.09	1.35	3.30	250	7.24	34.00	2.52	2.85	26.62	146.7	0.581
282p	6.89	34.16r	0.63r	3.60r	300	6.63	34.05	2.26	3.00	26.74	135.6	0.652
663p	4.96	34.38	0.42	3.74	400	5.97	34.10	1.21	3.34	26.87	124.5	0.782
1107p	3.53	34.45	0.58	3.72	500	5.57	34.18	0.69	3.57	26.98	114.8	0.902
					600	5.20	34.30	0.47	3.71	27.12	102.5	1.011
					700	4.83	34.39	0.42	3.74	27.23	92.4	1.108
					800	4.50	34.41	0.43	3.74	27.29	87.6	1.198
					1000	3.86	34.44	0.51	3.73	27.38	79.8	1.365

a) Middle thermometer reading of 6.52° rejected.

E See footnote page 168.

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

BLACK DOUGLAS; August 8, 1949; 0720 GCT; 42°16'N, 129°29'W; sounding, 1900 fm; wind, 340°, force 3; weather, partly cloudy; sea, rough; wire angle, 17°. 306

0	16.90	32.70E	5.76	0.80	0	16.90	32.70	5.76	0.80	23.80	411.8	0.000
10	16.65	32.68	5.75	0.61	10	16.65	32.68	5.75	0.61	23.84	408.0	0.041
25	16.60	32.75	5.74	0.58	20	16.62	32.71	5.75	0.59	23.87	405.3	0.082
48	14.06	32.84	6.32	0.60	30	16.49	32.77	5.80	0.58	23.94	398.4	0.122
71	10.58	33.03	6.14	1.10	50	14.00	32.85	6.32	0.61	24.55	341.3	0.196
93	9.18	33.12	5.57	1.45	75	10.15	33.05	6.06	1.14	25.43	257.1	0.271
140	7.85	33.64	3.96	2.07	100	8.88	33.16	5.25	1.51	25.72	230.3	0.332
184	7.49	33.84	3.38	2.27	150	7.70	33.71	3.82	2.13	26.33	173.2	0.433
273	6.54	33.96	2.48	2.55	200	7.33	33.87	3.20	2.33	26.51	156.7	0.515
361	5.75	34.05	1.40	2.86	250	6.70	33.93	2.72	2.47	26.64	144.6	0.590
495	5.03	34.16	0.68	3.16	300	6.28	33.99	2.12	2.63	26.74	135.4	0.660
796	4.08	34.36	0.34	3.28	400	5.52	34.09	1.11	2.99	26.92	119.6	0.788
1146	3.16	34.49	0.56	3.09	500	5.02	34.16	0.67	3.16	27.03	109.5	0.902
					600	4.66	34.22	0.47	3.24	27.12	101.9	1.008
					700	4.36	34.29	0.37	3.27	27.21	94.0	1.106
					800	4.06	34.36	0.34	3.28	27.30	86.2	1.196
					1000	3.51	34.45	0.44	3.18	27.42	75.1	1.357

BLACK DOUGLAS; August 8, 1949; 0115 GCT; 42°11'N, 130°22'W; sounding, 2200 fm; wind, 320°, force 3; weather, partly cloudy; sea, moderate; wire angle, 20°. 307

0	16.70	32.84E	5.81	0.66	0	16.70	32.84	5.81	0.66	23.95	397.0	0.000
9	16.51	32.77	5.83	0.62	10	16.45	32.77	5.84	0.62	23.95	397.0	0.040
23	16.26	32.81	5.86	0.63	20	16.29	32.82	5.86	0.63	24.03	390.0	0.079
46	16.21	32.70	5.00	0.60	30	16.25	32.80	5.82	0.62	24.02	391.0	0.118
68	10.61	32.65	7.00	0.95	50	14.50	32.68	4.99	0.63	24.32	363.3	0.194
90	8.60	32.72	6.63	1.14	75	9.38	32.65	6.95	1.00	25.24	275.3	0.273
137	7.85	33.04	5.67	1.68	100	8.39	32.76	6.41	1.29	25.48	252.7	0.339
177p	7.13	33.95r	2.25r	2.98r	150	7.58	33.23	5.49	1.79	25.97	207.3	0.454
182	7.03	33.57	4.96	1.98	200	6.95	33.66	4.67	2.07	26.39	167.4	0.548
274	6.62	33.92	3.53	2.36	250	6.75	33.86	3.90	2.28	26.58	150.7	0.627
450p	5.32	34.13	0.89	3.48	300	6.42	33.96	3.08	2.49	26.70	139.4	0.700
750p	3.96	34.33	0.30	3.67	400	5.66	34.08	1.41	3.20	26.89	122.3	0.830
1085p	3.17	34.47	0.47	3.67	500	5.04	34.17	0.65	3.55	27.03	109.2	0.946
					600	4.55	34.24	0.40	3.63	27.15	99.1	1.051
					700	4.13	34.30	0.31	3.67	27.24	90.7	1.146
					800	3.84	34.35	0.32	3.67	27.31	84.6	1.233
					1000	3.35	34.44	0.42	3.67	27.43	73.9	1.392

BLACK DOUGLAS; August 7, 1949; 1855 GCT; 42°06'N, 131°16'W; sounding, 1850 fm; wind, 320°, force 2; weather, overcast; sea, rough; wire angle, 7°. 308

0	16.38	32.81E	5.85	0.68	0	16.38	32.81	5.85	0.68	24.00	392.3	0.000
10	16.19	32.79	5.82	0.56	10	16.19	32.79	5.82	0.56	24.03	389.8	0.039
26	16.15	32.77	5.87	0.54	20	16.17	32.78	5.85	0.54	24.03	390.3	0.078
51	11.40	32.69	6.87	0.88	30	16.12	32.76	5.93	0.57	24.02	391.0	0.117
77	8.98	32.71	6.69	1.14	50	11.50	32.69	6.87	0.87	24.90	306.4	0.187
103	8.02	32.72	6.45	1.21	75	9.18	32.71	6.70	1.12	25.32	267.5	0.259
154	7.14	32.99	6.03	1.61	100	8.12	32.72	6.49	1.19	25.49	251.9	0.324
205	7.03	33.68	5.15	1.85	150	7.17	32.95	6.05	1.58	25.81	222.2	0.443
306	6.08	33.93	3.74	1.87	200	7.03	33.63	5.30	1.84	26.36	170.7	0.540
406	5.21	33.98	3.10	2.97	250	6.86	33.85	4.44	1.87	26.55	152.8	0.621
606	4.21	34.16	0.65	3.44	300	6.21	33.92	3.82	1.88	26.70	139.7	0.695
906	3.58	34.42	0.40	3.60	400	5.22	33.98	3.15	2.94	26.86	124.2	0.826
1256	2.87	34.48	0.48	3.57	500	4.79	34.05	1.55	3.26	26.97	114.9	0.945
					600	4.24	34.15	0.67	3.43	27.11	102.4	1.055
					700	3.93	34.26	0.53	3.54	27.23	91.4	1.151
					800	3.74	34.36	0.45	3.59	27.33	82.7	1.239
					1000	3.38	34.44	0.40	3.60	27.43	74.2	1.395

E See footnote page 168.

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

309 BLACK DOUGLAS; August 7, 1949; 1210 GCT; 42°02'N, 132°10'W; sounding, 2200 fm; wind, 340°, force 2; weather, cloudy; sea, moderate; wire angle, 30°.

0	15.86	32.77E	5.87	0.69	0	15.86	32.77	5.87	0.69	24.09	383.9	0.000
9	16.26	32.74	5.86	0.67	10	16.27	32.74	5.86	0.67	23.97	395.2	0.039
23	16.23	32.72	5.84	0.63	20	16.27	32.72	5.85	0.64	23.96	396.9	0.078
46	11.56	32.72	6.97	0.79	30	15.38	32.72	5.89	0.64	24.15	378.3	0.117
68	9.43	32.70	6.74	1.02	50	10.75	32.72	6.95	0.84	25.07	291.6	0.184
91	8.47	32.74	6.55	1.19	75	9.21	32.70	6.69	1.07	25.31	268.8	0.254
136	7.43	32.70	6.48	1.45	100	8.08	32.74	6.53	1.24	25.51	249.9	0.319
181	7.29	33.35	5.30	1.76	150	7.37	32.75	6.34	1.53	25.62	239.9	0.442
271	6.70	33.89	3.69	2.25	200	7.20	33.58	4.75	1.88	26.29	176.7	0.545
361	5.73	33.93	2.56	2.75	250	6.87	33.85	3.98	2.14	26.55	152.9	0.628
541	4.59	34.11	0.88	3.42	300	6.38	33.91	3.31	2.43	26.67	142.6	0.702
818	4.80r	34.31	0.34	3.62	400	5.41	33.96	2.14	2.93	26.83	128.0	0.836
1154	3.09	34.43	0.62	3.59	500	4.79	34.07	1.21	3.30	26.99	113.4	0.957
					600	4.39	34.16	0.63	3.51	27.10	103.3	1.065
					700	4.08	34.23	0.40	3.59	27.19	95.2	1.165
					800	3.81	34.30	0.35	3.62	27.27	88.0	1.257
					1000	3.36	34.40	0.45	3.62	27.40	77.0	1.422

310 BLACK DOUGLAS; August 7, 1949; 0450 GCT; 41°57'N, 33°03'W; sounding, 2200 fm; wind, 340°, force 4; weather, cloudy; sea, moderate; wire angle, missing.

0	16.94	32.88E	5.74	0.83	0	16.94	32.88	5.74	0.83	23.92	399.5	0.000
9	16.90	32.88	5.71	0.66	10	16.90	32.88	5.72	0.66	23.93	398.9	0.040
23	16.87	32.84	5.74	0.62	20	16.88	32.85	5.73	0.63	23.91	400.7	0.080
47	12.64	32.77	6.85	0.64	30	16.60	32.81	5.92	0.62	23.95	397.9	0.120
71	10.48	32.79	6.55	0.82	50	12.47	32.77	6.84	0.65	24.79	318.1	0.192
95	9.09	32.74	6.45	1.09	75	10.26	32.79	6.52	0.86	25.21	278.7	0.266
143	7.88	32.99	5.90	1.47	100	8.93	32.74	6.40	1.13	25.38	262.2	0.334
191	7.55	33.58	5.11	1.74	150	7.80	33.06	5.75	1.52	25.80	222.8	0.454
287	6.80	33.91	3.99	2.02	200	7.52	33.66	5.02	1.79	26.31	175.2	0.555
383	5.55	33.93	2.63	2.51	250	7.18	33.85	4.51	1.92	26.51	157.1	0.637
557	4.42	34.05	1.04	3.01	300	6.65	33.92	3.79	2.06	26.64	145.3	0.714
671u	4.84r	34.20	0.52	3.16	400	5.34	33.94	2.45	2.58	26.82	128.7	0.850
1110	3.15	34.40	0.65	3.11	500	4.66	33.99	1.47	2.92	26.94	117.8	0.973
					600	4.28	34.10	0.75	3.08	27.06	107.0	1.085
					700	3.99	34.24	0.52	3.16	27.21	93.5	1.186
					800	3.71	34.31	0.52	3.16	27.29	86.1	1.275
					1000	3.32	34.38	0.58	3.14	27.38	78.1	1.440

401 BLACK DOUGLAS; August 3, 1949; 0610 GCT; 40°50'N, 124°50'W; sounding, 850 fm; wind, 330°, force 1; weather, cloudy; sea, slight; wire angle, 0°.

0	14.41	33.31E	6.21	1.23	0	14.41	33.31	6.21	1.23	24.82	314.4	0.000
10	13.88	33.33	6.16	1.07	10	13.88	33.33	6.16	1.07	24.94	302.8	0.031
26	10.09	33.42	5.66	1.77	20	10.65	33.37	5.75	1.69	25.59	241.3	0.058
51	10.14	33.75	5.56	1.90	30	10.08	33.47	5.63	1.79	25.76	224.9	0.081
76	9.42	33.75	4.87	2.11	50	10.15	33.75	5.57	1.90	25.97	205.5	0.124
102	8.64	33.86	5.62r	2.43	75	9.42	33.75	4.88	2.10	26.09	194.4	0.174
152	7.90	33.95	3.97	2.65	100	8.68	33.85	4.63	2.41	26.29	176.2	0.221
202	7.17	34.02	2.22	2.81	150	7.92	33.95	3.99	2.64	26.48	158.1	0.304
302	6.45	34.13	1.21	3.09	200	7.22	34.02	2.26	2.81	26.64	144.0	0.380
402	5.84	34.16	0.97	3.33	250	6.80	34.08	1.60	2.93	26.74	135.0	0.449
606	5.00	34.27	0.47	3.42	300	6.48	34.13	1.22	3.08	26.83	127.5	0.515
1139	3.58	34.51	0.68	3.48	400	5.87	34.16	0.98	3.33	26.93	118.9	0.639
					500	5.39	34.20	0.69	3.39	27.02	111.2	0.754
					600	5.02	34.27	0.47	3.42	27.12	102.5	0.860
					700	4.72	34.34	0.48	3.45	27.21	94.6	0.959
					800	4.44	34.41	0.51	3.46	27.29	87.2	1.050
					1000	3.90	34.48	0.59	3.48	27.41	77.4	1.214

E See footnote page 168.

BLACK DOUGLAS; August 3, 1949; 1520 GCT; 40°41'N, 125°41'W; sounding, 1680 fm; wind, 350°, force 2; weather, overcast; sea, moderate; wire angle, 20°. 402

OBSERVED Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	INTERPOLATED Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	COMPUTED σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m
0	15.68	33.01E	5.87	0.68	0	15.68	33.01	5.87	0.68	24.31	362.5	0.000
9	15.47	32.95	5.88	0.67	10	15.46	32.95	5.90	0.67	24.32	362.5	0.036
23	15.19	32.97	5.93	0.69	20	15.25	32.97	5.91	0.68	24.38	357.0	0.072
46	12.68	32.95	6.15	0.83	30	15.00	32.97	5.99	0.71	24.43	352.1	0.108
69	9.96	33.06	5.84	1.34	50	12.25	32.96	6.14	0.88	24.98	299.8	0.173
92	8.27	33.28	4.83	1.80	75	9.23	33.10	5.65	1.44	25.62	239.6	0.240
138	7.94	33.84	2.99	2.49	100	8.23	33.41	4.25	1.95	26.01	202.2	0.296
185	7.47	33.98	2.24	2.74	150	7.83	33.90	2.78	2.59	26.46	160.8	0.386
279	6.45	34.05	1.67	2.86	200	7.35	34.00	2.14	2.77	26.61	147.3	0.463
374	5.73	34.05	1.26	3.07	250	6.83	34.04	1.82	2.83	26.71	138.4	0.535
565	4.93	34.18	0.55	3.44	300	6.26	34.05	1.57	2.90	26.79	130.8	0.602
852	3.98	34.40	0.37	3.58	400	5.59	34.06	1.14	3.13	26.88	122.9	0.729
1194	3.14	34.49	2.10r	3.43	500	5.18	34.12	0.74	3.34	26.98	114.5	0.847
					600	4.81	34.22	0.50	3.47	27.10	103.8	0.956
					700	4.45	34.32	0.40	3.54	27.22	92.9	1.055
					800	4.13	34.38	0.37	3.57	27.30	85.7	1.144
					1000	3.59	34.44	-	3.52	34.41	76.7	1.307

BLACK DOUGLAS; August 3, 1949; 2250 GCT; 40°32'N, 126°32'W; sounding, 1720 fm; wind, 320°, force 2; weather, partly cloudy; sea, smooth; wire angle, 15°. 403

0	16.58	32.50E	5.84	0.61	0	16.58	32.50	5.84	0.61	23.71	419.5	0.000
9	16.03	32.48	5.86	0.48	10	16.00	32.48	5.87	0.49	23.84	408.4	0.041
23	15.20	32.92	6.36	0.80	20	15.37	32.87	6.32	0.75	24.27	366.7	0.080
47	11.86	32.99	6.25	0.92	30	14.53	32.96	6.35	0.85	24.52	343.2	0.116
71	9.87	32.90	6.22	1.13	50	11.67	32.99	6.25	0.94	25.11	287.3	0.179
95	8.81	33.21	5.10	1.27	75	9.65	32.91	6.21	1.16	25.40	260.3	0.247
142	8.12	33.73	3.45	1.89	100	8.74	33.27	4.95	1.29	25.83	220.1	0.307
189	7.67	33.93	2.42	2.76	150	8.06	33.78	3.20	2.13	26.33	173.0	0.406
282	6.72	34.00	1.77	2.93	200	7.57	33.95	2.31	2.78	26.54	154.1	0.487
375	5.92	34.11	1.11	3.26	250	7.06	33.97	1.99	2.84	26.62	146.5	0.563
561	4.90	34.22	0.52	3.58	300	6.55	34.02	1.64	3.01	26.73	136.7	0.633
1178	3.13	34.45	0.68	3.67	400	5.74	34.13	0.94	3.33	26.92	119.6	0.761
					500	5.17	34.19	0.61	3.52	27.04	109.1	0.876
					600	4.77	34.24	0.52	3.60	27.12	101.7	0.981
					700	4.41	34.29	0.52	3.62	27.20	94.7	1.079
					800	4.08	34.33	0.54	3.64	27.27	88.7	1.171
					1000	3.54	34.40	0.58	3.65	27.38	79.1	1.338

BLACK DOUGLAS; August 4, 1949; 0527 GCT; 40°23'N, 127°22'W; sounding, 1420 fm; wind, 320°, force 3; weather, cloudy; sea, slight; wire angle, 0°. 404

0	16.55	32.66E	5.81	0.61	0	16.55	32.66	5.81	0.61	23.84	406.9	0.000
10	16.11	32.59	5.85	0.53	10	16.11	32.59	5.85	0.53	23.89	402.8	0.040
24	15.50	32.59	5.90	0.54	20	15.73	32.59	5.88	0.54	23.97	394.9	0.080
47	13.18	32.70	6.12	0.71	30	15.20	32.60	5.96	0.59	24.10	383.3	0.119
71	10.65	32.77	6.23	1.11	50	12.89	32.71	6.16	0.79	24.66	330.0	0.191
94	9.31	33.04	5.70	1.45	75	10.30	32.79	6.16	1.20	25.20	279.4	0.267
140	8.60	33.51	4.50	2.02	100	9.20	33.10	5.58	1.51	25.62	239.5	0.332
186	8.09	33.78	3.21	2.36	150	8.49	33.58	4.20	2.11	26.10	194.4	0.441
276	6.92	33.96	2.23	2.57	200	7.90	33.82	3.00	2.41	26.38	168.6	0.531
366	6.34	34.05	1.64	2.82	250	7.20	33.92	2.46	2.52	26.56	152.0	0.611
544	5.16	34.16	0.58	3.11	300	6.76	33.99	2.07	2.64	26.68	141.6	0.685
811	4.08	34.34	0.36	3.33	400	6.10	34.08	1.42	2.89	26.84	127.6	0.818
1122	3.18	34.51	0.54	3.21	500	5.39	34.14	0.73	3.04	26.97	115.6	0.941
					600	4.85	34.19	0.51	3.18	27.08	107.0	1.052
					700	4.43	34.27	0.40	3.28	27.18	96.5	1.153
					800	4.10	34.33	0.36	3.33	27.27	89.0	1.247
					1000	3.51	34.44	0.44	3.26	27.41	75.8	1.411

E See footnote page 168.

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
405	BLACK DOUGLAS; August 4, 1949; 1140 GCT; 40°14'N, 128°14'W; sounding, 2500 fm; wind, 340°, force 1; weather, overcast; sea, smooth; wire angle, slight.											
0	16.35	32.61E	5.81	0.73	0	16.35	32.61	5.81	0.73	23.85	406.3	0.000
10	16.19	32.56	5.84	0.64	10	16.19	32.56	5.84	0.64	23.84	406.9	0.041
24	15.59	32.61	5.93	0.73	20	15.76	32.58	5.90	0.68	23.97	396.2	0.081
47	13.34	32.79	6.32	0.84	30	15.44	32.65	6.03	0.76	24.08	384.6	0.120
71	9.94	32.95	5.95	1.36	50	13.10	32.81	6.32	0.88	24.70	326.7	0.191
95	9.24	33.19	5.40	1.66	75	9.60	32.99	5.88	1.45	25.47	253.6	0.264
143	8.88	33.66	3.48	2.37	100	9.19	33.26	5.24	1.74	25.75	227.6	0.324
190	8.36	33.91	2.40	2.62	150	8.82	33.71	3.24	2.41	26.16	189.4	0.428
282	7.44	34.00	1.95	2.85	200	8.22	33.92	2.28	2.65	26.42	165.8	0.517
373	6.86	34.07	1.95	3.05	250	7.73	33.98	2.02	2.78	26.53	155.2	0.597
458	6.21	34.13	0.73	3.39	300	7.31	34.02	1.95	2.88	26.63	146.9	0.673
801	4.56	34.38	0.41	3.60	400	6.62	34.09	1.80	3.15	26.77	134.0	0.812
1126	3.35	34.42	0.54	3.58	500	5.97	34.16	0.60	3.46	26.92	121.4	0.941
					600	5.45	34.26	0.48	3.54	27.06	108.6	1.056
					700	4.99	34.33	0.41	3.59	27.17	98.9	1.159
					800	4.57	34.38	0.41	3.60	27.26	90.8	1.255
					1000	3.78	34.42	0.46	3.60	27.37	80.4	1.426
406	BLACK DOUGLAS; August 4, 1949; 1732 GCT; 40°05'N, 129°04'W; sounding, 2300 fm; wind, 300°, force 3; weather, cloudy; sea, rough; wire angle, 0°.											
0	16.75	32.61E	5.87	0.69	0	16.75	32.61	5.87	0.69	23.76	415.1	0.000
10	16.53	32.61	5.84	0.65	10	16.53	32.61	5.84	0.65	23.80	410.4	0.041
24	15.24	32.57	6.05	0.66	20	15.85	32.59	5.96	0.65	23.94	397.4	0.082
48	12.88	32.66	6.43	0.82	30	14.46	32.57	6.18	0.70	24.24	370.4	0.120
72	11.44	32.86	6.24	1.02	50	12.73	32.67	6.42	0.83	24.66	330.0	0.190
96	10.36	32.95	6.03	1.20	75	11.23	32.87	6.23	1.04	25.10	289.1	0.267
144	8.94	33.28	5.08	1.88	100	10.18	32.97	5.99	1.23	25.36	264.8	0.337
193	8.33	33.77	2.84	2.59	150	8.84	33.34	4.87	2.02	25.87	217.3	0.457
389	5.87	33.98	2.12	3.08	200	8.24	33.79	2.73	2.60	26.31	175.7	0.556
635u	4.36	34.18	0.44	3.58	250	7.60	33.87	2.50	2.76	26.47	161.5	0.640
1076	3.37	34.43	0.42	3.73	300	6.95	33.91	2.36	2.87	26.59	150.2	0.717
					400	5.79	33.99	2.04	3.12	26.80	130.5	0.858
					500	5.00	34.08	1.12	3.37	26.97	115.3	0.981
					600	4.50	34.15	0.50	3.53	27.08	105.2	1.091
					700	4.18	34.23	0.44	3.62	27.18	96.5	1.192
					800	3.91	34.30	0.43	3.68	27.26	89.1	1.284
					1000	3.50	34.41	0.42	3.73	27.39	77.9	1.452
407	BLACK DOUGLAS; August 4, 1949; 2350 GCT; 39°56'N, 129°50'W; sounding, 2360 fm; wind, 320°, force 1; weather, partly cloudy; sea, moderate; wire angle, 0°.											
0	17.95	32.86E	5.74	0.67	0	17.95	32.86	5.74	0.67	23.67	423.7	0.000
10	17.27	32.84	5.75	0.65	10	17.27	32.84	5.75	0.66	23.82	410.0	0.042
24	16.56	32.88	5.84	0.68	20	16.78	32.87	5.80	0.67	23.95	397.2	0.082
48	14.00	32.83	6.37	0.74	30	16.17	32.88	5.90	0.70	24.10	383.3	0.121
73	10.20	32.81	6.64	0.74	50	13.70	32.83	6.41	0.74	24.59	336.8	0.193
97	8.85	32.70	6.53	1.11	75	10.01	32.80	6.65	0.77	25.26	274.1	0.269
146	7.52	33.08	5.60	1.75	100	8.53	32.70	6.50	1.19	25.41	259.2	0.336
194	7.40	33.77	4.38	2.06	150	7.51	33.15	5.48	1.79	25.91	212.2	0.453
292	6.64	33.96	2.78	2.61	200	7.36	33.79	4.29	2.11	26.44	163.1	0.548
334p	6.35	34.16r	0.73r	3.43r	250	6.95	33.92	3.40	2.37	26.60	148.8	0.626
389	5.82	34.02	1.65	3.07	300	6.59	33.97	2.67	2.66	26.69	140.8	0.699
620p	4.55	34.20	0.44	3.57	400	5.75	34.03	1.53	3.11	26.84	127.1	0.832
1077p	3.33	34.45	0.49	3.63	500	5.13	34.11	0.83	3.39	26.98	114.7	0.952
					600	4.64	34.18	0.45	3.55	27.09	104.6	1.063
					700	4.22	34.27	0.44	3.58	27.20	94.1	1.161
					800	3.90	34.33	0.44	3.61	27.29	86.8	1.253
					1000	3.46	34.42	0.46	3.63	27.40	76.7	1.416

E See footnote page 168.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

BLACK DOUGLAS; August 5, 1949; 0638 GCT; 39°47'N, 130°46'W; sounding, 2,480 fm; wind, 220°, force 2; weather, partly cloudy; sea, moderate; wire angle, 5°. 408

0	17.9	32.86E	5.72	0.68	0	17.9	32.86	5.72	0.68	23.69	422.2	0.000	
10	16.91	32.86	5.81	0.60	10	16.91	32.86	5.81	0.60	23.92	400.6	0.041	
25	16.42	32.84	5.89	0.67	20	16.56	32.85	5.88	0.64	23.99	393.7	0.081	
49	11.94	32.68	6.94	0.69	30	16.18	32.81	5.97	0.69	24.05	388.5	0.120	
73	9.90	32.92	6.49	0.78	50	11.75	32.68	6.93	0.69	24.85	311.6	0.190	
98	8.42	32.74	6.51	1.19	75	9.77	32.92	6.50	0.82	25.39	261.2	0.262	
146	7.66	33.03	5.68	1.67	100	8.38	32.74	6.51	1.23	25.47	254.1	0.326	
196	7.83	33.66	4.29	2.02	150	7.67	33.07	5.60	1.69	25.83	220.1	0.445	
294	6.75	-	3.34	2.42	200	7.82	33.68	4.25	2.05	26.29	177.9	0.544	
392	5.59	34.00	2.26	3.09	250	7.43	33.85	3.85	2.24	26.48	160.4	0.628	
588	4.49	34.07	0.80	3.50	300	6.68	33.93	3.26	2.50	26.64	145.0	0.705	
884	3.80	34.36	0.38	3.73	400	5.52	34.00	2.21	3.12	26.84	126.4	0.840	
1232	2.96	34.52	0.71	3.72	500	4.81	34.03	1.39	3.36	26.95	116.7	0.962	
					600	4.44	34.08	0.77	3.51	27.03	109.8	1.075	
					700	4.16	34.18	0.43	3.61	27.14	99.9	1.180	
					800	3.95	34.28	0.38	3.69	27.24	91.0	1.275	
					1000	3.53	34.42	0.45	3.73	27.40	77.4	1.445	

BLACK DOUGLAS; August 5, 1949; 1320, 1427 GCT; 39°38'N, 131°36'W; sounding, 2,450 fm; wind, 220°, force 4; weather, overcast; sea, rough; wire angle, 50°, 50°. 409

0	17.5	32.94E	5.67	0.64	0	17.5	32.94	5.67	0.64	23.84	407.6	0.000	
6	17.08	32.82	5.75	0.61	10	17.05	32.83	5.77	0.60	23.86	405.9	0.041	
17	17.00	32.86	5.74	0.57	20	16.96	32.86	5.79	0.58	23.90	401.9	0.081	
36	15.86	32.84	5.97	0.58	30	16.56	32.84	5.87	0.58	23.98	394.8	0.121	
57	12.84	33.01	6.50	0.55	50	13.55	32.87	6.42	0.55	24.65	331.0	0.193	
79	11.66	32.94	6.36	0.90	75	11.79	32.95	6.43	0.84	25.06	292.8	0.271	
57p	12.77r	32.94r	6.50	0.61r	100	10.67	33.35	5.50	1.54	25.57	244.8	0.339	
105p	10.51	33.40	4.86	1.61	150	8.97	33.69	4.05	1.97	26.12	193.2	0.448	
202p	7.90	33.84	3.60	2.22	200	7.95	33.83	3.62	2.21	26.38	168.6	0.539	
					250	7.29	33.89	3.38	2.34	26.53	155.5	0.619	
340	6.29	33.96	2.90	2.60	300	6.74	33.93	3.14	2.45	26.63	145.9	0.695	
520	4.99	34.07	0.99	3.41	400	5.65	34.00	2.40	2.94	26.83	128.1	0.831	
797	4.11	34.33	0.45	3.64	500	5.06	34.06	1.19	3.35	26.95	117.4	0.954	
1124	3.19	34.43	0.47	3.70	600	4.74	34.15	0.64	3.54	27.05	108.0	1.067	
					700	4.41	34.25	0.53	3.62	27.17	97.6	1.175	
					800	4.10	34.33	0.45	3.64	27.27	89.0	1.273	
					1000	3.54	34.40	0.45	3.68	27.38	79.1	1.442	

BLACK DOUGLAS; August 6, 1949; 0250 GCT; 39°29'N, 132°27'W; sounding, 2,200 fm; wind, 320°, force 5; weather, cloudy; sea, very rough; wire angle, 25°. 410

0	17.8	33.04E	5.66	0.50	0	17.8	33.04	5.66	0.50	23.84	407.5	0.000	
8	17.76	33.02	5.66	0.48	10	17.75	33.02	5.67	0.48	23.84	407.8	0.041	
21	17.75	33.01	5.68	0.44	20	17.75	33.01	5.68	0.44	23.83	408.9	0.082	
43	15.55	32.92	6.16	0.47	30	17.57	33.00	5.81	0.44	23.87	405.7	0.122	
65	12.61	32.86	6.56	0.49	50	14.50	32.89	6.35	0.48	24.47	348.3	0.198	
86	11.47	32.97	6.36	0.54	75	11.90	32.88	6.49	0.51	24.98	300.0	0.279	
128	10.35	33.06	5.92	0.79	100	11.03	33.01	6.23	0.60	25.24	275.8	0.351	
170	9.33	33.37	5.34	1.20	150	9.84	33.17	5.62	0.97	25.57	245.4	0.481	
252	7.64	33.84	3.63	2.06	200	8.51	33.60	4.75	1.54	26.12	193.9	0.591	
336	6.73	34.04	2.09	2.58	250	7.68	33.83	3.65	2.05	26.42	165.6	0.681	
501	5.39	34.10u	0.98u	3.14u	300	7.12	33.98	2.70	2.38	26.62	147.2	0.759	
1010	3.48	34.43	0.39	3.35	400	6.04	34.07	1.49	2.84	26.84	127.8	0.896	
					500	5.40	34.10	0.99	3.14	26.94	118.7	1.020	
					600	4.95	34.25	0.47	3.28	27.11	103.2	1.130	
					700	4.53	34.32	0.44	3.32	27.21	93.9	1.229	
					800	4.15	34.37	0.41	3.34	27.29	86.6	1.319	
					1000	3.52	34.43	0.39	3.35	27.40	76.6	1.482	

E See footnote page 168.

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

501 HORIZON; August 10, 1949; 0350 GCT; 38°50'N, 124°05'W; sounding, missing; wind, 320°, force 5; weather, clear; sea, high; wire angle, 51°.

0	12.8	33.44	5.78	1.29	0	12.8	33.44	5.78	1.29	25.26	272.7	0.000
10	12.25	33.39	5.70	1.23	10	12.25	33.39	5.70	1.23	25.32	267.3	0.027
26	12.29	33.42	5.58	1.26	20	12.27	33.40	5.62	1.25	25.32	267.0	0.054
40	11.14	33.52	5.51	1.27	30	12.27	33.44	5.55	1.27	25.35	264.6	0.080
67	9.76	-	4.34	1.66	50	10.49	33.59	5.48	1.32	25.79	223.1	0.129
128	8.47	33.89	2.18	2.19	75	9.55	33.71	5.00	1.82	26.04	199.5	0.182
96p	9.07	33.80	2.21	2.02	100	9.00	33.81	2.20	2.06	26.21	183.9	0.230
230	7.03	34.07	1.61	2.26	150	8.13	33.94	2.08	2.21	26.44	162.2	0.316
478	5.83	34.19	0.61	2.38r	200	7.55	34.04	1.79	2.24	26.61	147.3	0.394
825	4.47	34.36	0.38	3.19	250	7.15	34.09	1.50	2.28	26.70	138.8	0.465
1121	3.42	34.44	0.61	3.10	300	6.80	34.12	1.24	2.35	26.78	132.7	0.533
					400	6.22	34.16	0.80	2.62	26.88	123.5	0.661
					500	5.74	34.20	0.57	2.86	27.97	115.6	0.781
					600	5.31	34.26	0.45	3.03	27.08	106.9	0.892
					700	4.93	34.32	0.39	3.14	27.17	98.8	0.995
					800	4.55	34.35	0.38	3.19	27.24	92.8	1.091
					1000	3.83	34.42	0.46	3.15	27.36	81.1	1.265

504 HORIZON; August 10, 1949; 1808, 1825, 2005 GCT; 38°17'N, 126°32'W; sounding, missing; wind, 340°, force 4; weather, overcast; sea, very rough; wire angle, 48°, 52°, 55°.

0	15.7	33.04	5.68	0.36	0	15.7	33.04	5.68	0.36	24.33	360.7	0.000
8	15.66	32.99	5.79	0.36	10	15.67	32.99	5.79	0.36	24.30	364.0	0.036
18	15.65	32.99	5.75	0.44	20	15.62	32.99	5.75	0.45	24.31	363.1	0.073
34	13.82	32.97	6.01	0.52	30	14.35	32.97	5.99	0.50	24.57	338.7	0.108
49	10.80	-	-	-	50	10.66	32.97	5.99	0.62	25.28	271.5	0.169
					75	9.70	33.18	5.54	1.13	25.60	241.0	0.233
62	10.25	32.97	5.87	0.82	100	9.02	33.54	4.07	1.63	25.99	204.3	0.288
					150	8.50	33.87	2.67	1.97	26.33	172.7	0.383
107	8.93	33.61	3.79	1.71	200	8.07	34.00	2.16	2.20	26.50	157.7	0.465
163	8.41	33.91	2.46	2.02	250	7.57	34.06	1.81	2.34	26.62	146.7	0.542
228u	7.81[a]	34.04	1.94	2.30	300	6.98	34.10	1.51	2.42	26.74	136.5	0.612
362	6.34	34.13	1.17	2.50	400	6.04	34.14	1.01	2.57	26.89	122.6	0.741
577	4.95	34.22	0.44	3.00	500	5.39	34.19	0.69	2.83	27.01	111.9	0.859
923	3.86	-	-	-	600	4.85	(34.23)			(27.11)	(103.4)	(0.966)
					700	4.49						
					800	4.19						
					1000	(3.71)						

505 HORIZON; August 11, 1949; 0254 GCT; 38°06'N, 127°20'W; sounding, missing; wind, 310°, force 3; weather, partly cloudy; sea, rough; wire angle, 20°.

0	16.1	33.12	5.43	0.53	0	16.1	33.12	5.43	0.53	24.29	364.4	0.000
9	16.09	33.51r	5.54	0.53	10	16.10	33.11	5.55	0.54	24.29	364.6	0.036
23	15.97	33.10	5.63	0.56	20	16.02	33.10	5.62	0.55	24.30	364.0	0.073
46	13.56	33.30	5.79	0.81	30	15.64	33.17	5.68	0.60	24.44	350.8	0.109
69	11.39	33.04	5.68	1.04	50	13.35	33.25	5.80	0.84	24.99	299.3	0.174
138	9.16	33.66	4.12	1.83	75	11.00	33.05	5.61	1.09	25.28	271.9	0.245
184	8.66	33.84	2.44	2.33	100	10.02	33.32	5.27	1.31	25.66	236.3	0.308
277	7.38	34.18	2.42	2.29	150	9.02	33.72	3.44	2.14	26.14	191.1	0.416
371	6.56	34.25	1.24	2.76	200	8.44	33.93	2.44	2.33	26.39	168.2	0.505
558	5.46	34.14r	0.52	3.06	250	7.75	34.14	2.42	2.30	26.66	143.6	0.583
845	4.33	34.36	0.23	3.28	300	7.17	34.20	2.36	2.34	26.79	137.6	0.652
1260	3.08	34.51	0.73	3.23	400	6.37	34.26	1.06	2.88	26.94	118.0	0.777
					500	5.76	34.28	0.68	3.01	27.04	109.9	0.891
					600	5.28	34.29	0.44	3.10	27.10	104.3	0.998
					700	4.87	34.31	0.30	3.18	27.17	98.7	1.099
					800	4.49	34.34	0.25	3.26	27.23	92.8	1.195
					1000	3.83	34.42	0.34	3.28	27.36	81.0	1.369

a) Left thermometer reading of 8.31° rejected.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

HORIZON; August 11, 1949; 0907 GCT; 37°55'N, 128°10'W; sounding, missing; wind, 300°, force 2; weather, partly cloudy; sea, rough; wire angle, 0°. 506

0	16.4	33.06	5.53	0.53	0	16.4	33.06	5.53	0.53	24.18	374.7	0.000	
10	16.41	33.01	5.50	0.53	10	16.41	33.01	5.50	0.53	24.15	378.6	0.038	
25	16.33	32.99	5.50	0.51	20	16.37	33.00	5.48	0.51	24.15	378.6	0.075	
50	14.29	32.97	5.89	0.66	30	16.10	32.98	5.52	0.51	24.19	374.6	0.113	
75	11.70	33.10	5.94	0.99	50	14.29	32.97	5.89	0.66	24.58	338.2	0.184	
100	9.84	33.12	5.29	1.26	75	11.70	33.10	5.94	0.99	25.19	280.4	0.262	
148	8.70	33.69	3.28	1.97	100	9.84	33.12	5.29	1.26	25.53	248.3	0.328	
196	7.80	33.93	2.69	2.23	150	8.63	33.73	3.25	1.98	26.20	185.1	0.437	
292	6.54	33.98	2.03	2.26	200	7.74	33.94	2.65	2.25	26.50	157.4	0.522	
389	5.76	34.02	1.15	2.81	250	7.00	33.97	2.31	2.44	26.63	145.8	0.597	
583	4.98	34.18	0.43	3.20	300	6.48	33.98	1.95	2.59	26.71	138.6	0.669	
876	3.90	34.42	0.35	3.18	400	5.70	34.03	1.07	2.84	26.85	126.5	0.801	
1172	3.18	34.43	0.59	3.12	500	5.25	34.11	0.58	3.11	26.96	116.1	0.923	
					600	4.90	34.21	0.41	3.20	27.08	105.5	1.033	
					700	4.53	34.33	0.37	3.20	27.22	93.0	1.133	
					800	4.17	34.40	0.35	3.18	27.31	84.6	1.221	
					1000	3.57	34.43	0.41	3.16	27.40	77.3	1.383	

HORIZON; August 11, 1949; 1659 GCT; 37°43'N, 128°58'W; sounding, missing; wind, 300°, force 4; weather, overcast; sea, rough; wire angle, 12°. 507

0	16.7	32.86	5.48	0.53	0	16.7	32.86	5.48	0.53	23.97	395.5	0.000	
8	16.67	32.79	5.53	0.53	10	16.66	32.79	5.53	0.53	23.92	400.0	0.040	
23	16.62	32.77	5.50	0.56	20	16.64	32.77	5.51	0.55	23.91	401.4	0.080	
48	13.34	32.84	6.04	0.61	30	16.50	32.77	5.54	0.58	23.94	398.6	0.120	
73	10.80	32.75	5.64	-	50	13.12	32.84	6.05	0.62	24.72	324.8	0.192	
97	9.53	32.79	5.94	0.76	75	10.62	32.75	5.65	0.67	25.11	287.8	0.269	
146	8.42	33.13	4.90	1.51	100	9.44	32.80	5.95	0.78	25.35	265.5	0.338	
195	7.62	33.60	3.94	2.00	150	8.32	33.15	4.80	1.54	25.80	223.6	0.460	
250p	7.30	33.91	2.54	2.03r	200	7.59	33.64	3.80	2.02	26.29	177.6	0.561	
358p	5.90	33.98	1.91	2.86	250	7.30	33.91	2.54	2.38	26.54	154.0	0.643	
567p	4.44	34.16	0.73	3.18	300	6.65	33.95	2.19	2.65	26.66	143.1	0.717	
872p	3.92	34.36	0.47	3.37	400	5.49	34.00	1.65	2.96	26.85	126.0	0.852	
1168p	3.18	-	-	-	500	4.73	34.10	0.98	3.06	27.02	110.6	0.970	
					600	4.35	34.18	0.66	3.22	27.12	101.3	1.076	
					700	4.16	34.25	0.56	3.29	27.20	94.7	1.174	
					800	4.03	34.31	0.50	3.34	27.26	89.7	1.266	
					1000	3.61	(34.40)	-	-	(27.37)	(80.0)	(1.436)	

HORIZON; August 12, 1949; 0030 GCT; 37°32'N, 129°47'W; sounding, missing; wind, 330° force 2; weather, cloudy; sea, moderate; wire angle, 15°. 508

0	18.1	33.03	5.30	0.54	0	18.1	33.03	5.30	0.54	23.77	414.6	0.000	
9	17.87	33.06	5.32	0.54	10	17.81	33.06	5.31	0.54	23.86	406.3	0.041	
23	17.51	33.06	5.38	0.53	20	17.57	33.06	5.37	0.53	23.91	401.0	0.081	
48	15.14	32.92	5.72	0.54	30	17.26	33.03	5.47	0.54	23.96	396.5	0.121	
72	11.28	32.84	6.29	-	50	14.84	32.89	5.77	0.54	24.40	355.0	0.196	
96	10.20	33.86	5.78	0.79	75	11.09	32.84	6.28	0.62	25.10	289.0	0.277	
104p	9.71	33.08r	5.11r	1.29r	100	9.85	32.88	5.70	0.83	25.34	266.0	0.346	
145	8.70	33.06	5.18	1.26	150	8.58	33.10	5.13	1.30	25.72	231.1	0.470	
194	7.88	33.64	4.21	1.69	200	7.82	33.69	4.10	1.74	26.29	177.1	0.573	
238p	7.42	32.86r	3.53	2.02	250	7.32	33.88	3.33	2.10	26.52	156.8	0.656	
517p	5.44	34.11	0.82	3.01	300	6.89	33.93	2.63	2.40	26.61	147.9	0.732	
816p	4.04	34.33	0.38	3.08	400	6.18	33.99	1.53	2.86	26.75	135.5	0.874	
1139p	3.20	34.40	0.69	3.02	500	5.55	34.09	0.88	3.01	26.91	121.2	1.002	
					600	4.97	34.21	0.58	3.05	27.08	106.4	1.116	
					700	4.50	34.29	0.42	3.07	27.19	95.6	1.217	
					800	4.11	34.33	0.39	3.08	27.27	89.2	1.309	
					1000	3.51	34.38	0.50	3.06	27.36	80.2	1.479	

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
509	HORIZON; August 12, 1949; 0628 GCT; 37°21'N, 130°36'W; sounding, missing; wind, 240°, force 4; weather, squally; sea, moderate; wire angle, 27°.											
0	18.4	33.30	5.30	0.40	0	18.4	33.30	5.30	0.40	23.88	403.4	0.000
10	18.35	33.26	5.25	0.40	10	18.35	33.26	5.25	0.40	23.88	404.3	0.040
22	18.18	33.28	5.36	0.45	20	18.22	33.27	5.35	0.45	23.92	400.9	0.081
45	16.30	33.22	5.71	-	30	18.08	33.26	5.45	0.46	23.94	398.8	0.121
67	13.06	33.22	-	-	50	15.28	33.22	5.74	0.47	24.56	340.2	0.194
89	12.23	33.22	5.78	0.49	75	12.66	33.22	5.78	0.48	25.10	289.0	0.273
134	11.28	33.40	5.29	0.80	100	11.99	33.23	5.76	0.52	25.24	276.4	0.344
188	9.18	33.62	4.78	1.34	150	10.53	33.45	5.12	0.97	25.67	236.1	0.472
243	7.94	33.91	3.91	1.81	200	8.87	33.75	4.64	1.46	26.18	188.1	0.578
453	5.70	34.00	1.65	2.90	250	7.83	33.92	3.79	1.86	26.47	161.0	0.665
766	4.35	34.29	0.54	-	300	7.20	33.95	3.07	2.17	26.59	150.5	0.743
1062	3.40	34.47	0.53	3.30	400	6.13	33.96	2.01	2.70	26.74	137.0	0.887
					500	5.44	34.04	1.38	3.04	26.89	123.7	1.017
					600	4.97	34.14	0.90	3.23	27.02	111.5	1.135
					700	4.59	34.23	0.61	3.30	27.14	101.1	1.241
					800	4.23	34.31	0.55	3.30	27.24	92.0	1.338
					1000	3.58	34.44	0.54	3.30	27.41	76.8	1.506
510	HORIZON; August 12, 1949; 1240 GCT; 37°10'N, 131°25'W; sounding, missing; wind, 270°, force 2; weather, overcast; sea, moderate; wire angle, 15°.											
0	18.5	33.06	5.24	0.44	0	18.5	33.06	5.24	0.44	23.69	422.0	0.000
10	18.45	33.04	5.25	0.44	10	18.45	33.04	5.25	0.44	23.68	423.3	0.042
24	18.39	33.04	5.30	0.47	20	18.40	33.03	5.28	0.46	23.69	422.5	0.085
48	16.38	33.15	5.71	0.43	30	18.23	33.05	5.37	0.47	23.75	417.4	0.126
71	13.08	33.15	5.98	0.43	50	15.44	33.15	5.75	0.43	24.47	348.6	0.203
95	12.04	33.28	5.77	0.51	75	12.87	33.15	6.00	0.44	25.01	297.9	0.284
142	10.75	33.26	5.23	0.78	100	11.92	33.28	5.72	0.53	25.29	271.4	0.355
189	8.81	33.66	4.71	1.23	150	10.42	33.27	5.15	0.85	25.55	247.6	0.485
284	7.28	33.91	3.90	1.60	200	8.60	33.73	4.60	1.30	26.21	185.4	0.594
380	6.07	33.98	2.53	2.24	250	7.81	33.86	4.20	1.49	26.43	165.3	0.681
570	4.80	34.05	0.90	3.01	300	7.09	33.93	3.71	1.68	26.59	150.5	0.759
864	3.93	-	-	-	400	5.87	33.99	2.26	2.39	26.80	131.4	0.901
1161	3.11	34.43	0.53	3.08	500	5.12	34.01	1.29	2.88	26.90	121.9	1.027
					600	4.70	34.08	0.82	3.03	27.00	112.8	1.145
					700	4.39	34.19	0.69	3.05	27.12	101.8	1.252
					800	4.10	34.30	0.63	3.07	27.24	91.2	1.348
					1000	3.54	34.40	0.55	3.08	27.38	79.1	1.518
601	HORIZON; August 15, 1949; 1101 GCT; 37°12'N, 123°22'W; sounding, missing; wind, 320°, force 3; weather, cloudless; sea, rough; wire angle, 10°.											
0	15.6	33.39	5.58	0.38	0	15.6	33.39	5.58	0.38	24.62	333.5	0.000
9	15.48	33.31	5.50	0.38	10	15.45	33.31	5.50	0.38	24.59	336.1	0.033
23	14.85	33.39	5.63	0.41	20	15.00	33.38	5.61	0.40	24.74	321.9	0.066
48	10.41	33.21	4.99	-	30	13.83	33.34	5.63	0.44	24.96	301.5	0.097
73	9.14	33.55	3.77	1.47	50	10.22	33.21	4.88	0.91	25.54	246.6	0.152
98	8.55	33.68	3.11	1.63	75	9.03	33.57	3.70	1.49	26.02	201.8	0.208
147	8.19	33.91	2.25	1.77	100	8.53	33.69	3.07	1.64	26.19	185.8	0.257
175	8.01	34.11r	1.46	2.03	150	8.17	33.91	2.15	1.78	26.42	165.0	0.344
288	6.78	34.00	1.30	2.08	200	7.77	33.97	1.33	2.06	26.52	155.5	0.425
534	5.48	34.23	0.41	2.47	250	7.20	33.99	1.30	2.07	26.62	146.9	0.500
844	4.26	34.43	0.37	2.57	300	6.70	34.00	1.30	2.09	26.69	140.2	0.572
1269	3.13	34.52	0.81	2.65	400	6.09	34.09	1.12	2.20	26.85	126.8	0.705
					500	5.65	34.19	0.50	2.42	26.98	115.3	0.826
					600	5.18	34.27	0.37	2.50	27.10	104.4	0.936
					700	4.77	34.35	0.37	2.52	27.21	94.4	1.035
					800	4.42	34.41	0.37	2.56	27.30	86.8	1.126
					1000	3.82	34.48	0.45	2.60	27.41	76.5	1.290

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	
HORIZON; August 15, 1949; 0550 GCT; 37°03'N, 123°57'W; sounding, missing; wind, 340°, force 3; weather, overcast; sea, rough; wire angle, 35°.													602
0	15.4	33.39	5.39	0.44	0	15.4	33.39	5.39	0.44	24.68	327.9	0.000	
8	15.31	33.37	5.57	0.44	10	15.28	33.36	5.58	0.45	24.67	328.9	0.033	
20	14.83	33.31	5.60	0.47	20	14.83	33.31	5.60	0.47	24.73	322.9	0.065	
41	10.25	33.46	4.55	1.33	30	12.73	33.33	5.56	0.49	25.17	281.1	0.096	
61	9.24	33.58	3.69	1.72	50	9.75	33.51	4.05	1.54	25.85	216.9	0.145	
82	8.78	33.73	3.07	1.93	75	8.95	33.67	3.25	1.90	26.11	193.1	0.197	
122	8.20	33.89	2.49	2.02	100	8.52	33.85	2.72	1.97	26.32	173.7	0.242	
158	7.98	33.91	2.25	2.11	150	8.03	33.91	2.29	2.08	26.44	163.0	0.326	
287	6.43	34.02	1.28	2.52	200	7.42	33.93	1.96	2.27	26.54	153.5	0.406	
442	5.92	34.18	0.54	2.69	250	6.80	33.96	1.57	2.43	26.65	143.9	0.480	
703	4.78	34.27	0.49	2.83	300	6.37	34.04	1.19	2.53	26.77	132.7	0.550	
1120	3.41	34.44	0.84	2.74	400	6.08	34.17	0.60	2.65	26.91	120.7	0.675	
					500	5.64	34.20	0.51	2.74	26.99	114.4	0.794	
					600	5.20	34.24	0.50	2.80	27.07	106.8	0.905	
					700	4.79	34.27	0.49	2.83	27.14	100.7	1.008	
					800	4.40	34.32	0.52	2.83	27.23	93.3	1.105	
					1000	3.74	34.42	0.61	2.78	27.37	79.9	1.278	
HORIZON; August 14, 1949; 2353 GCT; 36°50'N, 124°43'W; sounding, missing; wind, 340°, force 3; weather, overcast; sea, rough; wire angle, 40°.													603
0	16.0	33.28	5.60	0.58	0	16.0	33.28	5.60	0.58	24.45	349.6	0.000	
8	15.63	33.28	5.64	0.58	10	15.61	33.28	5.65	0.58	24.53	342.1	0.035	
21	15.36	33.35	5.69	0.62	20	15.40	33.35	5.68	0.62	24.63	332.3	0.068	
38	14.64	33.33	5.81	0.86	30	15.03	33.34	5.73	0.76	24.71	325.6	0.101	
55	12.36	33.21	5.91	0.93	50	13.09	33.22	5.90	0.91	25.02	296.4	0.163	
73	11.36	33.30	5.55	1.11	75	11.18	33.30	5.42	1.16	25.44	256.6	0.232	
103	9.05	33.42	4.30	1.56	100	9.16	33.40	4.44	1.52	25.86	216.7	0.292	
131	8.58	33.69	3.27	1.84	150	8.37	33.80	2.76	1.92	26.30	176.1	0.390	
189u	10.15r	33.96	2.12	2.02	200	7.83	33.99	2.01	2.06	26.53	154.9	0.472	
617	4.75	34.25	0.33	2.89	250	7.37	34.05	1.54	2.19	26.64	144.8	0.548	
885	3.88	34.43	0.44	2.84	300	6.95	34.08	1.22	2.35	26.72	137.7	0.618	
					400	6.19	34.13	0.73	2.65	26.86	125.1	0.750	
					500	5.47	34.18	0.43	2.82	26.99	113.6	0.869	
					600	4.81	34.24	0.34	2.89	27.12	102.4	0.977	
					700	4.42	34.32	0.34	2.88	27.22	92.5	1.074	
					800	4.12	34.39	0.39	2.86	27.31	84.7	1.163	
					1000	(3.63)	(34.47)	-	-	(27.42)	(75.0)	(1.323)	
HORIZON; August 14, 1949; 1741 GCT; 36°37'N, 125°30'W; sounding, missing; wind, 340°, force 4; weather, overcast; sea, high; wire angle, 32°.													604
0	16.9	33.17	5.46	0.45	0	16.9	33.17	5.46	0.45	24.15	378.0	0.000	
9	16.92	33.12	5.44	0.45	10	16.92	33.12	5.44	0.45	24.11	381.8	0.038	
22	16.91	33.13	5.41	0.43	20	16.91	33.12	5.43	0.43	24.11	382.1	0.076	
42	16.91	33.13	5.45	0.41	30	16.91	33.13	5.43	0.44	24.12	381.5	0.114	
63	12.91	32.97	6.19	0.52	50	16.74	33.10	5.65	0.55	24.13	381.0	0.191	
98p	11.26	33.03	-	-	75	12.24	32.97	6.15	0.62	24.99	299.6	0.276	
123	10.61	33.26	5.12	1.16	100	11.19	33.03	5.75	0.83	25.23	277.1	0.348	
239	9.86r	33.96	2.64	2.13	150	9.62	33.51	4.39	1.55	25.87	216.8	0.471	
312	7.12	34.02	1.89	2.51	200	8.31	33.84	3.30	1.91	26.34	173.0	0.569	
442	6.10	-	-	-	250	7.68	33.98	2.48	2.19	26.54	154.3	0.650	
700	4.52	34.14r	0.33	3.19	300	7.22	34.01	1.98	2.44	26.63	146.3	0.725	
1113	3.43	34.47	0.73	3.05	400	6.40	34.08	1.42	2.82	26.80	131.6	0.864	
					500	5.68	34.16	0.93	3.04	26.95	117.8	0.989	
					600	5.04	34.24	0.50	3.14	27.09	105.1	1.101	
					700	4.52	34.30	0.34	3.18	27.20	95.1	1.201	
					800	4.14	34.35	0.39	3.17	27.28	87.9	1.292	
					1000	3.62	34.43	0.58	3.10	27.39	77.9	1.458	

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
605	HORIZON; August 14, 1949; 0940, 1010 GCT; 36°24'N, 126°17'W; sounding, missing; wind, 320°, force 4; weather, overcast; sea, rough; wire angle, 45°, 40°.											
0	17.1	33.15	5.35	0.46	0	17.1	33.15	5.35	0.46	24.10	382.4	0.000
7	17.04	33.10	5.25	0.46	10	17.04	33.10	5.25	0.46	24.07	386.2	0.038
17	17.05	33.10	5.35	0.48	20	17.03	33.10	5.42	0.48	24.07	386.1	0.077
35	16.93	33.13	5.71	0.46	30	16.96	33.13	5.60	0.48	24.11	382.6	0.115
50	15.21	32.99	6.23	0.48	50	15.21	32.99	6.23	0.48	24.40	355.6	0.189
64p	16.57r	33.12r	5.99r	0.43r	75	12.55	32.99	5.96	0.54	24.95	303.8	0.272
					100	11.10	33.02	4.67	0.67	25.24	276.4	0.344
105	10.83	33.04	4.42	0.69	150	9.11	33.40	2.94	1.19	25.87	216.7	0.467
139	9.48	33.30	3.28	-	200	8.24	33.83	2.40	1.70	26.34	172.7	0.565
205	8.20	33.84	2.39	1.71	250	8.05	33.86	2.40	1.71	26.39	168.7	0.650
273	7.94	33.87	2.41	1.70	300	7.70	33.90	2.27	1.79	26.48	161.4	0.732
419	-	-	0.56	-	400	6.64	34.03	0.69	2.46	26.72	138.7	0.883
667p	4.86[a]	34.25	0.42	2.77	500	5.78	34.13	0.47	2.66	26.92	121.2	1.013
1064	3.64	34.42	0.97	2.64	600	5.18	34.21	0.44	2.74	27.05	108.9	1.128
					700	4.74	34.27	0.43	2.77	27.15	100.1	1.232
					800	4.36	34.33	0.53	2.74	27.24	92.1	1.329
					1000	3.76	34.41	0.84	2.66	27.36	80.8	1.501
606	HORIZON; August 14, 1949; 0313 GCT; 36°11'N, 127°04'W; sounding, missing; wind, 320°, force 4; weather, partly cloudy; sea, very rough; wire angle, 20°.											
0	17.6	33.13	5.32	0.49	0	17.6	33.13	5.32	0.49	23.97	395.3	0.000
10	17.56	33.08	5.24	0.49	10	17.56	33.08	5.24	0.49	23.93	399.0	0.040
24	17.53	33.10	5.45	0.48	20	17.53	33.09	5.42	0.48	23.94	397.9	0.080
47	15.42	32.86	5.11	0.50	30	17.23	33.10	5.42	0.48	24.02	390.9	0.119
71	10.86	32.81	5.43	0.64	50	15.09	32.85	5.12	0.52	24.32	363.3	0.194
94	9.57	32.83	5.30	0.88	75	10.62	32.81	5.43	0.68	25.16	283.4	0.275
141	-	32.80	5.35	1.56	100	9.46	32.83	5.30	0.98	25.37	263.5	0.344
187	7.95	33.37	4.69	2.00	150	8.52	32.83	5.35	1.66	25.52	250.1	0.472
283	6.77	33.96	3.30	2.40	200	7.77	33.49	4.50	2.06	26.14	191.3	0.583
568	5.12	34.23	-	3.13	250	7.09	33.84	3.72	2.26	26.52	156.6	0.669
857	4.04	34.38	0.38	3.10	300	6.64	34.00	3.07	2.47	26.70	139.4	0.743
1277	3.02	34.52	0.71	3.06	400	5.96	34.13	1.93	2.85	26.89	122.3	0.874
					500	5.43	34.19	1.18	3.08	27.00	112.5	0.991
					600	4.98	34.25	0.74	3.13	27.11	103.5	1.099
					700	4.57	34.31	0.50	3.12	27.20	95.0	1.198
					800	4.23	34.36	0.40	3.10	27.28	88.5	1.290
					1000	3.65	34.44	0.45	3.08	27.40	77.5	1.456
607	HORIZON; August 13, 1949; 2115 GCT; 35°58'N, 127°51'W; sounding, missing; wind, 310°, force 4; weather, partly cloudy; sea, moderate; wire angle, 23°.											
0	17.4	32.97	5.37	0.48	0	17.4	32.97	5.37	0.48	23.90	402.0	0.000
10	17.30	32.97	5.41	0.48	10	17.30	32.97	5.41	0.48	23.91	401.2	0.040
23	17.22	32.94	5.42	0.48	20	17.25	32.95	5.42	0.48	23.91	401.8	0.080
46	16.00	32.74	5.68	0.54	30	16.95	32.84	5.45	0.50	23.89	403.5	0.121
69	13.84	32.88	5.89	0.57	50	15.35	32.81	6.05	0.58	24.23	371.7	0.198
136	8.78	32.99	5.33	1.15	75	12.12	32.89	5.82	0.58	24.95	303.4	0.283
180	8.45	33.58	3.54	1.98	100	9.85	32.92	5.66	0.68	25.38	263.0	0.353
268	7.26	33.95	2.34	2.21	150	8.64	33.10	4.45	1.36	25.71	232.1	0.477
356	6.20	34.00	1.52	2.62	200	8.23	33.77	3.20	1.79	26.30	177.0	0.580
537	4.84	34.13	0.71	2.93	250	7.52	33.92	2.53	2.10	26.52	156.5	0.663
814	4.02	34.34	0.37	3.20	300	6.86	33.98	2.02	2.38	26.66	143.7	0.737
1101	3.30	34.49	0.64	3.04	400	5.77	34.02	1.23	2.74	26.83	128.1	0.873
					500	5.03	34.10	0.81	2.88	26.98	114.1	0.994
					600	4.63	34.19	0.56	3.00	27.10	103.8	1.103
					700	4.34	34.27	0.43	3.12	27.19	95.3	1.203
					800	4.07	34.33	0.37	3.20	27.27	88.7	1.295
					1000	3.57	34.44	0.50	3.12	27.41	76.5	1.460

a) Middle thermometer reading of 5.03° rejected.

b) Middle thermometer reading of 15.08° rejected.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

HORIZON; August 13, 1949; 1354, 1418 GCT; 35°44'N, 128°37'W; sounding, missing; wind, 310°, force 3; weather, partly cloudy; sea, moderate; wire angle, 28°, 27°. 608

0	17.7	33.03	5.19	0.47	0	17.7	33.03	5.19	0.47	23.86	406.0	0.000	
9	17.67	32.94	5.29	0.47	10	17.67	32.94	5.30	0.47	23.79	412.2	0.041	
22	16.48	32.92	5.41	0.50	20	16.95	32.92	5.40	0.50	23.95	397.4	0.081	
44	15.34	32.92	5.64	-	30	16.00	32.92	5.50	0.51	24.17	376.9	0.120	
64	12.14	32.85	5.91	0.54	50	14.94	32.92	5.71	0.52	24.40	355.0	0.193	
86	10.32	32.86	5.95	0.73	75	10.97	32.85	5.95	0.60	25.13	286.2	0.273	
					100	9.86	32.90	5.86	0.87	25.36	264.7	0.342	
126	9.20	33.10	5.25	1.15	150	8.77	33.32	4.40	1.36	25.86	217.6	0.461	
166	8.52	33.51	-	-	200	8.05	33.79	3.20	1.80	26.34	172.9	0.561	
242	7.54	33.93	2.55	2.16	250	7.42	33.94	2.43	2.22	26.55	153.6	0.642	
320	6.54	33.96	1.87	2.63	300	6.77	33.96	2.00	2.55	26.65	144.1	0.716	
481	5.36	34.11	0.74	2.98	400	5.91	34.01	1.18	2.86	26.81	130.5	0.853	
745	4.24	34.33	0.33	3.28	500	5.27	34.13	0.68	3.00	26.98	114.8	0.976	
1026	3.52	34.45	0.59	3.36	600	4.78	34.23	0.44	3.12	27.11	102.6	1.085	
					700	4.38	34.30	0.35	3.25	27.21	93.6	1.183	
					800	4.07	34.36	0.35	3.31	27.29	86.3	1.273	
					1000	3.58	34.44	0.55	3.36	27.41	76.7	1.436	

HORIZON; August 13, 1949; 0806 GCT; 35°31'N, 129°24'W; sounding, missing; wind, 340°, force 3; weather, cloudless; sea, moderate; wire angle, 20°. 609

0	17.9	33.03	5.25	0.43	0	17.9	33.03	5.25	0.43	23.81	410.5	0.000	
10	17.90	33.04	4.85	0.43	10	17.90	33.04	4.85	0.43	23.82	409.9	0.041	
23	17.12	33.03	5.01	0.47	20	17.55	33.03	4.97	0.46	23.89	402.8	0.082	
47	14.86	33.13	5.26	0.48	30	16.46	33.03	5.08	0.48	24.15	378.6	0.121	
71	12.82	33.10	5.28	0.43	50	14.71	33.13	5.26	0.49	24.61	335.0	0.192	
94	11.90	33.01	5.14	0.51	75	12.67	33.08	5.26	0.43	24.99	299.5	0.271	
140	10.01	33.20	4.69	0.97	100	11.62	33.01	5.10	0.55	25.14	286.1	0.345	
186	8.69	33.60	-	-	150	9.70	33.27	4.57	1.04	25.67	235.8	0.475	
278	7.28	33.93	3.01	1.89	200	8.47	33.70	3.94	1.40	26.20	186.0	0.581	
373	5.94	33.98	2.20	2.41	250	7.71	33.89	3.31	1.71	26.46	161.6	0.667	
564	4.89	34.18	0.56	2.93	300	6.92	33.95	2.80	2.02	26.62	146.9	0.744	
856	3.91	34.38	0.32	3.06	400	5.71	33.99	1.95	2.54	26.81	129.6	0.883	
1151	3.26	34.45	0.60	2.99	500	5.15	34.09	0.91	2.83	26.96	116.3	1.006	
					600	4.75	34.22	0.45	2.97	27.11	103.0	1.115	
					700	4.38	34.30	0.33	3.03	27.21	93.5	1.213	
					800	4.07	34.36	0.33	3.05	27.30	86.3	1.303	
					1000	3.56	34.42	0.44	3.03	27.39	77.8	1.467	

HORIZON; August 13, 1949; 0114 GCT; 35°18'N, 130°11'W; sounding, missing; wind, 310°, force 4; weather, cloudy; sea, rough; wire angle, 25°. 610

0	18.8	33.28	4.96	0.39	0	18.8	33.28	4.96	0.39	23.78	413.0	0.000	
9	18.55	33.26	5.25	0.39	10	18.50	33.26	5.25	0.39	23.84	408.0	0.041	
22	17.88	33.22	5.25	0.41	20	18.08	33.23	5.25	0.40	23.92	400.7	0.082	
45	16.58	33.19	5.70	0.41	30	17.51	33.21	5.30	0.41	24.04	389.2	0.121	
67	13.70	33.28	5.95	0.39	50	15.75	33.19	5.71	0.41	24.44	352.1	0.195	
90	12.96	33.30	5.78	0.40	75	13.36	33.29	5.95	0.39	25.03	296.4	0.276	
135	12.56[a]	33.48	5.35	0.62	100	12.90	33.33	5.66	0.41	25.14	286.0	0.349	
179	9.26	33.48	4.54	1.32	150	10.80	33.48	5.15	0.82	25.65	238.5	0.480	
267	7.90	33.89	3.72	1.78	200	8.92	33.50	4.30	1.50	25.98	207.5	0.592	
354	6.83	34.00	2.12	2.44	250	8.16	33.77	3.88	1.71	26.31	176.8	0.688	
529	5.26	34.09	0.85	2.95	300	7.47	33.96	3.25	1.96	26.56	153.4	0.770	
806	4.22	-	-	-	400	6.33	34.02	1.42	2.63	26.76	135.6	0.915	
1094	3.42	34.43	0.61	3.18	500	5.47	34.07	0.90	2.91	26.91	121.7	1.043	
					600	4.97	34.18	0.80	3.00	27.05	108.6	1.158	
					700	4.58	34.30	0.75	3.06	27.19	95.8	1.261	
					800	4.26	34.36	0.73	3.10	27.27	88.6	1.353	
					1000	3.67	34.42	0.65	3.16	27.38	79.2	1.520	

a) Left thermometer reading of 11.88° rejected.

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
704	HORIZON; August 17, 1949; 1924 GCT; 34°54'N, 124°04'W; sounding, missing; wind, 310°, force 3; weather, overcast; sea, rough; wire angle, 17°.											
0	16.5	33.21	5.28	0.40	0	16.5	33.21	5.28	0.40	24.27	366.8	0.000
8	16.54	33.22	5.55	0.40	10	16.52	33.22	5.55	0.41	24.28	365.6	0.037
23	16.42	33.21	5.56	0.44	20	16.45	33.21	5.55	0.44	24.29	365.1	0.073
47	13.23	33.17	6.16	0.52	30	16.24	33.20	5.57	0.47	24.33	361.5	0.110
71	11.62	33.30	5.32	1.18	50	12.99	33.17	6.16	0.53	25.00	298.1	0.175
94	10.45	33.55	4.33	1.41	75	11.48	33.34	5.18	1.27	25.42	258.9	0.245
142	9.12	33.69	3.32	1.81	100	10.22	33.57	4.16	1.46	25.82	220.9	0.305
189	8.38	33.96	2.18	2.30	150	9.00	33.72	3.15	1.89	26.14	191.5	0.408
282	6.96	33.98	2.08	2.39	200	8.19	33.96	2.13	2.33	26.45	162.3	0.496
377	6.36	34.11	1.34	2.85	250	7.41	33.96	2.10	2.37	26.57	152.0	0.575
570	5.06	34.22	0.49	3.01	300	6.82	33.99	2.02	2.42	26.67	142.6	0.649
861	4.17	34.40	0.52	2.99	400	6.22	34.13	1.16	2.91	26.86	125.7	0.783
1156	3.48	34.45	0.80	2.84	500	5.49	34.19	0.59	2.99	27.00	113.1	0.902
					600	4.96	34.24	0.50	3.01	27.10	104.0	1.011
					700	4.65	34.30	0.51	3.00	27.18	96.6	1.111
					800	4.35	34.36	0.52	2.99	27.26	89.7	1.204
					1000	3.84	34.43	0.63	2.93	27.37	80.4	1.374
705	HORIZON; August 18, 1949; 0055 GCT; 34°39'N, 124°48'W; sounding, missing; wind, 330°, force 4; weather, partly cloudy; sea, moderate; wire angle, 36°.											
0	17.6	33.22	5.25	0.46	0	17.6	33.22	5.25	0.46	24.02	390.7	0.000
9	17.59	33.22	5.35	0.46	10	17.57	33.22	5.35	0.46	24.04	389.2	0.039
21	17.37	33.19	5.42	0.47	20	17.40	33.19	5.42	0.47	24.05	387.6	0.078
41	15.53	33.15	5.78	0.49	30	17.01	33.17	5.51	0.48	24.13	380.8	0.116
61	12.38	32.99	6.00	0.56	50	14.10	33.11	5.95	0.52	24.73	324.2	0.187
81	10.68	32.89	5.96	0.66	75	11.08	32.90	5.98	0.62	25.15	284.4	0.263
120	9.56	33.24	5.01	1.15	100	10.14	32.98	5.72	0.85	25.37	263.4	0.331
158	8.44	33.66	3.86	1.62	150	8.58	33.59	4.00	1.55	26.10	194.8	0.446
231	7.68	34.00	2.92	1.80	200	8.00	33.89	3.30	1.74	26.42	164.8	0.536
304	6.84	34.07	1.82	2.19	250	7.46	34.03	2.63	1.86	26.61	147.5	0.613
452	5.56	34.16	1.00	2.52	300	6.87	34.07	1.86	2.17	26.73	137.3	0.685
688	4.63	34.37	0.31	2.77	400	5.91	34.12	1.23	2.44	26.89	122.5	0.815
1072	3.56	34.47	0.64	2.76	500	5.36	34.20	0.83	2.59	27.02	110.8	0.932
					600	4.94	34.30	0.43	2.73	27.15	99.4	1.037
					700	4.58	34.38	0.31	2.77	27.26	89.8	1.131
					800	4.28	34.42	0.37	2.77	27.32	84.5	1.218
					1000	3.75	34.46	0.57	2.76	27.40	77.2	1.380
706	HORIZON; August 18, 1949; 0650 GCT; 34°23'N, 125°33'W; sounding, missing; wind, 320°, force 4; weather, partly cloudy; sea, moderate; wire angle, 20°.											
0	17.6	33.22	3.78r.	0.40	0	17.6	33.22	(5.95)	0.40	24.03	389.6	0.000
9	17.54	33.17	4.33r.	0.40	10	17.53	33.17	(5.95)	0.40	24.01	391.9	0.039
22	17.35	33.17	5.95	0.50	20	17.39	33.17	5.95	0.48	24.04	388.8	0.078
46	16.10	33.15	5.65	0.55	30	17.10	33.17	5.94	0.53	24.11	382.9	0.117
69	13.16	33.14	6.00	0.50	50	15.68	33.15	5.67	0.55	24.42	353.5	0.190
135p	– a)	33.30	4.94	1.08r	75	12.79	33.14	5.99	0.50	25.02	297.2	0.272
138	10.07	33.43	4.88	1.07	100	11.57	33.19	5.68	0.58	25.29	272.0	0.343
182	8.59	33.78	3.38	1.98	150	9.56	33.55	4.37	1.31	25.91	212.9	0.464
246p	7.38	34.01	2.84	2.46	200	8.14	33.83	3.16	2.16	26.36	171.3	0.560
439p	5.37	34.07	0.99	2.99	250	7.33	33.91	2.81	2.48	26.54	154.6	0.641
662p	4.58	34.29	1.32	3.13	300	6.72	33.96	2.45	2.70	26.66	143.2	0.716
					400	5.68	34.03	1.18	2.93	26.85	126.2	0.849
					500	5.08	34.13	–	3.06	27.00	112.4	0.969
					600	4.77	34.24	–	3.11	27.12	102.5	1.076

a) Thermometer readings of 9.44° and 9.68° rejected.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	
HORIZON; August 18, 1949; 1317 GCT; 34°07'N, 126°17'W; sounding, missing; wind, 360°, force 4; weather, overcast; sea, moderate; wire angle, 17°.													707
0	18.1	33.22	5.10	0.47	0	18.1	33.22	5.10	0.47	23.91	400.5	0.000	
10	17.95	33.17	5.38	0.47	10	17.95	33.17	5.38	0.47	23.91	401.6	0.040	
24	17.07	33.15	5.22	0.54	20	17.36	33.15	5.23	0.52	24.03	389.6	0.080	
47	15.84	33.12	5.57	0.54	30	16.65	33.14	5.24	0.54	24.19	374.9	0.118	
71	12.48	33.06	6.04	0.63	50	15.69	33.12	5.65	0.54	24.40	355.9	0.191	
95u	- a)	33.19	5.20	0.39r	75	12.18	33.06	6.05	0.66	25.07	292.0	0.272	
143	9.79	33.42	4.69	1.32	100	11.27	33.22	5.13	0.87	25.37	264.5	0.342	
191	8.48	33.69	3.80	1.89	150	9.42	33.46	4.59	1.42	25.87	217.4	0.462	
286	7.25	33.98	2.52	2.32	200	8.36	33.74	3.64	1.95	26.25	181.1	0.562	
380	6.14	34.00	1.60	2.66	250	7.69	33.93	2.95	2.19	26.50	158.3	0.646	
569	4.92	34.16	0.67	3.15	300	7.08	33.99	2.37	2.37	26.63	145.9	0.722	
857	4.06	34.36	0.46	3.22	400	6.00	34.01	1.45	2.72	26.79	131.6	0.861	
1152	3.36	34.47	0.75	3.21	500	5.30	34.08	0.88	3.03	26.93	119.0	0.986	
					600	4.82	34.19	0.62	3.17	27.08	106.1	1.099	
					700	4.51	34.27	0.48	3.20	27.17	97.2	1.200	
					800	4.22	34.34	0.46	3.22	27.26	89.7	1.294	
					1000	3.73	34.42	0.55	3.21	27.37	79.9	1.463	
HORIZON; August 18, 1949; 1829 GCT; 33°51'N, 127°02'W; sounding, missing; wind, 310°, force 2; weather, partly cloudy; sea, moderate; wire angle, 27°.													708
0	18.1	33.15	5.38	0.46	0	18.1	33.15	5.38	0.46	23.86	405.3	0.000	
9	17.94	33.15	5.16	0.46	10	17.89	33.15	5.16	0.46	23.91	401.6	0.040	
22	17.54	33.16	5.20	0.53	20	17.58	33.16	5.18	0.52	23.99	393.9	0.080	
44	17.62	33.46	-	0.49	30	17.55	33.19	5.28	0.53	24.02	391.7	0.119	
66	14.74	33.34	5.79	0.44	50	17.58	33.46	5.59	0.47	24.22	373.0	0.196	
87	14.00	33.49	5.57	0.44	75	14.03	33.37	5.77	0.44	24.94	304.4	0.281	
128	12.23	33.42	5.30	0.70	100	14.04	33.48	5.49	0.46	25.02	297.1	0.356	
168	10.58	33.57	4.80	1.16	150	11.20	33.45	5.08	0.95	25.55	247.5	0.492	
245	8.12	33.93	3.28	2.11	200	9.04	33.76	4.17	1.62	26.16	189.9	0.602	
253p	- b)	33.95	3.18	2.16	250	8.05	33.95	3.22	2.14	26.46	161.9	0.689	
400p	6.60 c)	34.14	0.74	2.86	300	7.38	34.04	1.95	2.44	26.63	146.4	0.766	
722p	4.56	34.33	0.36	3.23	400	6.60	34.14	0.74	2.86	26.82	130.0	0.904	
1027p	3.70	34.48	0.65	3.29	500	5.82	34.20	0.49	3.06	26.97	116.5	1.028	
					600	5.15	34.26	0.39	3.17	27.09	104.8	1.138	
					700	4.66	34.32	0.37	3.22	27.20	95.4	1.238	
					800	4.26	34.37	0.39	3.25	27.28	87.9	1.330	
					1000	3.75	34.47	0.62	3.29	27.41	76.4	1.494	
HORIZON; August 19, 1949; 0036 GCT; 33°35'N, 127°46'W; sounding, missing; wind, 335°, force 3; weather, cloudy; sea, moderate; wire angle, 26°.													709
0	19.1	33.35	5.45	0.51	0	19.1	33.35	5.45	0.51	23.76	414.9	0.000	
9	18.89	33.33	5.36	0.51	10	18.77	33.33	5.36	0.51	23.83	409.2	0.041	
22	18.25	33.24	5.52	0.50	20	18.29	33.24	5.51	0.51	23.88	404.5	0.082	
45	18.07	33.60	5.54	0.41	30	18.20	33.32	5.53	0.48	23.96	397.0	0.122	
68	15.37	33.49	5.15	0.40	50	18.01	33.60	5.54	0.41	24.22	372.8	0.199	
90	14.16	33.55	5.90	0.44	75	14.91	33.50	5.18	0.40	24.86	312.6	0.285	
134	12.43	33.40	5.52	0.64	100	13.81	33.54	5.89	0.48	25.12	288.2	0.360	
178	10.86	33.64	4.93	0.99	150	11.83	33.47	5.30	0.76	25.46	257.0	0.496	
263	8.34	33.93	4.23	1.40	200	10.13	33.76	4.73	1.18	25.98	207.5	0.612	
347	7.00	33.94	3.04	2.06	250	8.62	33.91	4.34	1.54	26.35	173.3	0.708	
518	5.36	34.10	0.97	2.93	300	7.66	33.94	3.84	1.83	26.51	158.5	0.790	
787	4.22	34.32	0.32	3.14	400	6.35	33.98	2.14	2.35	26.73	138.3	0.939	
1078	3.51	34.46	0.60	2.96	500	5.49	34.08	1.07	2.87	26.91	121.2	1.069	
					600	4.93	34.18	0.67	3.06	27.06	108.1	1.183	
					700	4.51	34.27	0.43	3.12	27.18	97.1	1.285	
					800	4.18	34.33	0.32	3.14	27.26	90.0	1.380	
					1000	3.68	34.43	0.49	3.03	27.39	78.5	1.548	

a) Thermometer readings of 18.61° and 18.40° rejected.
b) Thermometer readings of 10.04° and 8.23° rejected.
c) Middle thermometer reading of 6.03° rejected

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

710 HORIZON; August 19, 1949; 0615 GCT; 33°19'N, 128°32'W; sounding, missing; wind, 320°, force 3; weather, cloudless; sea, rough; wire angle, 5°.

0	19.80	33.39	5.15	0.46	0	19.80	33.39	5.15	0.46	23.61	429.6	0.000
10	19.44	33.42	5.12	0.46	10	19.44	33.42	5.12	0.46	23.72	418.9	0.042
25	19.37	33.78	5.21	0.37	20	19.41	33.70	5.19	0.40	23.94	398.1	0.083
49	18.27	33.78	5.30	0.36	30	19.34	33.78	5.24	0.37	24.02	391.0	0.123
74	16.16	34.04	–	0.37	50	18.10	33.78	5.30	0.36	24.33	361.9	0.198
148	14.08	33.95	5.13	0.54	75	16.10	34.04	5.29	0.37	25.01	298.5	0.281
196	10.14	33.66	4.62	1.20	100	14.40	34.03	5.28	0.39	25.37	264.1	0.351
294	8.08	33.98	3.84	1.74	150	14.00	33.94	5.12	0.55	25.39	264.1	0.483
392	6.50	34.00	2.14	2.32	200	10.02	33.66	4.58	1.23	25.92	213.1	0.603
588	4.75	34.12	0.82	2.93	250	8.89	33.88	4.16	1.51	26.28	179.8	0.701
886	3.86	34.36	0.39	2.93	300	7.95	33.98	3.78	1.78	26.50	159.0	0.785
1184	3.17	34.52	0.80	2.92	400	6.41	34.00	2.02	2.36	26.72	137.7	0.933
					500	5.35	34.06	1.16	2.81	26.91	121.1	1.063
					600	4.70	34.14	0.80	2.93	27.05	108.3	1.178
					700	4.32	34.22	0.60	2.93	27.16	98.5	1.281
					800	4.04	34.30	0.46	2.93	27.25	90.5	1.376
					1000	3.60	34.44	0.49	2.93	27.40	77.0	1.543

801 HORIZON; August 22, 1949; 0528, 0649 GCT; 33°50'N, 120°40'W; sounding, missing; wind, 330°, force 5; weather, partly cloudy; sea, very rough; wire angle, 41°, 47°.

0	15.8	33.55	5.26	0.47	0	15.8	33.55	5.26	0.47	24.69	326.0	0.000
8	15.77	33.40	5.39	0.47	10	15.76	33.40	5.41	0.47	24.59	336.0	0.033
18	15.64	33.46	5.49	0.43	20	15.55	33.46	5.49	0.44	24.69	327.4	0.066
38	11.51	33.37	5.05	1.13	30	12.65	33.40	5.42	0.57	25.24	274.5	0.096
56	10.36	33.49	4.34	1.37	50	10.79	33.39	4.40	1.30	25.58	242.7	0.148
					75	9.75	33.59	3.70	1.53	25.91	211.5	0.205
113	8.82	33.77	2.89	1.81	100	9.08	33.71	3.15	1.72	26.12	192.5	0.255

802 HORIZON; August 21, 1949; 2342 GCT; 33°32'N, 121°22'W; sounding, missing; wind, 330°, force 4; weather, cloudy; sea, very rough; wire angle, 35°.

0	16.0	33.62	5.47	0.45	0	16.0	33.62	5.47	0.45	24.71	325.0	0.000
8	15.86	33.60	5.66	0.45	10	15.84	33.60	5.66	0.45	24.73	323.3	0.032
19	15.65	33.55	5.65	0.47	20	15.58	33.54	5.65	0.47	24.74	322.2	0.065
40	13.80	33.37	5.56	0.69	30	15.12	33.43	5.62	0.58	24.76	320.9	0.097
60	11.02	33.35	4.96	1.15	50	12.26	33.36	5.35	0.83	25.29	270.6	0.156
80	9.56	33.48	4.04	1.53	75	9.65	33.41	4.25	1.45	25.79	223.2	0.218
118	9.15	33.91	2.34	2.02	100	9.28	33.76	3.13	1.91	26.12	191.9	0.270
155	8.94	34.05	1.85	2.12	150	8.98	34.03	1.92	2.11	26.38	168.1	0.360
233	8.18	34.20	1.08	2.42	200	8.60	34.14	1.32	2.34	26.53	155.2	0.440
270	7.64	34.25	0.97	2.46	250	7.94	34.22	1.02	2.44	26.69	140.4	0.514
483	6.02	34.25	0.44	2.75	300	7.39	34.26	0.87	2.50	26.81	130.3	0.582
752	4.56	34.40	0.35	2.91	400	6.61	34.24	0.55	2.63	26.90	122.7	0.708
1057	3.67	34.47	0.66	2.89	500	5.90	34.26	0.39	2.77	27.00	113.0	0.826
					600	5.28	34.30	0.36	2.86	27.11	103.5	0.934
					700	4.79	34.37	0.35	2.90	27.22	93.2	1.032
					800	4.39	34.42	0.36	2.91	27.31	85.7	1.123
					1000	3.82	34.46	0.55	2.90	27.40	78.0	1.286

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

HORIZON; August 21, 1949; 1747 GCT; 33°15'N, 122°05'W; sounding, missing; wind, 340°, force 5; weather, partly cloudy; sea, high; wire angle, 35°. 803

0	17.60	33.31	5.22	0.50	0	17.60	33.31	5.22	0.50	24.10	383.0	0.000	
9	17.32	33.26	5.30	0.50	10	17.32	33.26	5.30	0.50	24.13	380.7	0.038	
20	17.32	33.28	5.34	0.53	20	17.32	33.28	5.34	0.53	24.14	379.5	0.076	
42	17.30	33.26	5.26	0.53	30	17.32	33.27	5.34	0.53	24.13	380.6	0.114	
62	13.68	33.26	5.81	0.53	50	16.31	33.26	5.32	0.53	24.36	359.2	0.188	
84	13.10	33.42	5.56	0.66	75	13.30	33.32	5.70	0.56	25.05	293.8	0.271	
126	10.1	33.55	4.76	1.13	100	12.08	33.49	5.23	0.83	25.42	259.1	0.340	
168	8.70	33.64	4.19	1.63	150	9.26	33.59	4.44	1.42	25.99	205.2	0.455	
252	7.72	33.93	2.38	2.23	200	8.26	33.81	3.58	1.91	26.32	174.5	0.551	
337	6.84	34.02	1.55	2.56	250	7.76	33.93	2.42	2.21	26.49	159.2	0.634	
508	5.71	34.20	0.49	2.91	300	7.20	33.99	1.86	2.43	26.62	147.6	0.711	
770	4.54	34.43	0.37	3.02	400	6.37	34.08	1.02	2.75	26.80	131.3	0.850	
1159	3.51	34.51	0.76	3.21	500	5.76	34.19	0.51	2.91	26.96	116.5	0.925	
					600	5.24	34.29	0.38	2.94	27.11	103.7	1.084	
					700	4.80	34.38	0.37	2.99	27.23	92.7	1.182	
					800	4.45	34.44	0.37	3.04	27.32	84.9	1.271	
					1000	3.88	34.49	0.53	3.12	27.41	76.6	1.433	

HORIZON; August 21, 1949; 0721 GCT; 32°40'N, 123°30'W; sounding, missing; wind, 340°, force 5; weather, partly cloudy; sea, very high; wire angle, 20°. 805

0	17.6	33.31	5.15	0.44	0	17.6	33.31	5.15	0.44	24.08	384.2	0.000	
10	17.65	33.31	5.26	0.44	10	17.65	33.31	5.26	0.44	24.08	384.5	0.038	
24	17.66	33.30	5.30	0.49	20	17.65	33.30	5.28	0.47	24.08	385.4	0.077	
47	14.97	33.31	5.90	0.50	30	17.64	33.30	5.32	0.49	24.08	385.6	0.115	
71	11.12	33.40	4.96	1.17	50	14.47	33.31	5.89	0.50	24.80	316.9	0.186	
94	10.03	33.57	3.89	1.57	75	10.83	33.42	4.74	1.27	25.60	241.8	0.256	
141	8.71	33.85	2.50	1.92	100	9.83	33.60	3.70	1.63	25.91	212.6	0.312	
188	7.98	33.98	2.88r	1.87r	150	8.58	33.88	2.37	1.97	26.33	173.3	0.409	
283	6.97	34.09	1.45	2.33	200	7.86	34.01	1.85	2.15	26.54	153.8	0.490	
378	5.64	34.07	1.28	2.50	250	7.35	34.08	1.57	2.27	26.67	142.2	0.565	
568	4.84	34.25	0.42	2.73	300	6.70	34.09	1.41	2.36	26.77	133.5	0.633	
854	4.20	34.44	0.43	2.90	400	5.45	34.08	1.21	2.54	26.92	119.7	0.760	
1262	3.12	34.51	0.90	2.73	500	5.01	34.18	0.64	2.67	27.05	108.0	0.874	
					600	4.78	34.28	0.42	2.76	27.15	98.8	0.977	
					700	4.58	34.36	0.43	2.84	27.24	91.4	1.072	
					800	4.34	34.42	0.43	2.90	27.31	85.1	1.160	
					1000	3.82	34.48	0.55	2.86	27.41	76.6	1.322	

HORIZON; August 21, 1949; 0023 GCT; 32°22'N, 124°13'W; sounding, missing; wind, 360°, force 4; weather, overcast; sea, very rough; wire angle, 45°. 806

0	17.5	33.26	5.11	0.50	0	17.5	33.26	5.11	0.50	24.09	383.5	0.000	
7	17.46	33.19	5.23	0.50	10	17.45	33.18	5.23	0.50	24.03	389.4	0.039	
16	17.45	33.15	5.21	0.50	20	17.45	33.15	5.22	0.50	24.01	391.8	0.078	
34	17.44	33.21	5.34	0.53	30	17.45	33.19	5.27	0.52	24.04	389.3	0.117	
50	16.55	33.24	5.34	0.50	50	16.55	33.24	5.34	0.50	24.29	366.0	0.192	
67	13.22	33.21	5.65	0.51	75	13.11	33.22	5.62	0.52	25.01	297.5	0.275	
96	12.52	33.31	5.33	0.60	100	12.37	33.32	5.30	0.63	25.24	276.9	0.347	
128	11.11	33.38	4.93	0.92	150	10.04	33.44	4.66	1.15	25.75	228.8	0.470	
190	8.96	33.68	4.08	1.63	200	8.82	33.76	3.90	1.72	26.20	186.5	0.578	
253	8.34	33.96	2.76	2.14	250	8.35	33.95	2.80	2.13	26.42	166.2	0.665	
398	6.95	-	-	-	300	7.89	34.05	2.12	2.44	26.57	153.0	0.745	
638	4.98	34.29	0.44	3.18	400	6.93	34.15	1.26	2.86	26.78	133.7	0.888	
1020	3.74	34.47	0.65	3.07	500	5.97	34.21	0.69	3.08	26.96	117.7	1.014	
					600	5.19	34.27	0.44	3.17	27.10	104.6	1.125	
					700	4.73	34.33	0.44	3.18	27.20	95.4	1.225	
					800	4.39	34.38	0.48	3.16	27.28	88.6	1.317	
					1000	3.79	34.46	0.62	3.08	27.40	77.5	1.483	

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

807 HORIZON; August 20, 1949; 1808 GCT; 32°05'N, 124°55'W; sounding, missing; wind, 360°, force 4; weather, overcast; sea, very rough; wire angle, 40°.

0	18.50	33.33	5.25	0.52	0	18.50	33.33	5.25	0.52	23.89	402.6	0.000
8	17.98	33.31	5.11	0.52	10	17.97	33.31	5.11	0.52	24.01	392.0	0.040
19	17.96	33.33	5.21	0.54	20	17.96	33.33	5.21	0.54	24.03	389.8	0.079
40	18.07	33.53	5.14	0.47	30	18.02	33.40	5.21	0.53	24.06	387.2	0.118
59	17.60	33.62	5.35	0.43	50	18.00	33.59	5.22	0.45	24.21	373.5	0.194
115	13.76	33.66	5.34	0.49	75	15.40	33.66	5.35	0.43	24.87	311.3	0.279
150	11.23	33.58	4.88	0.92	100	13.88	33.67	5.35	0.46	25.20	279.1	0.353
213	8.85	33.95	2.14	2.16	150	11.23	33.58	4.88	0.92	25.65	238.6	0.482
277	8.10	34.05	1.78	2.26	200	9.13	33.92	2.33	2.07	26.27	179.4	0.588
385	7.09	34.11	0.95	2.64	250	8.35	34.02	1.90	2.22	26.47	161.2	0.672
643	4.98	34.31	0.30	3.00	300	7.88	34.07	1.66	2.32	26.58	151.4	0.750
1069	3.74	34.49	0.65	2.92	400	6.93	34.12	0.86	2.70	26.76	136.0	0.894
					500	5.94	34.22	0.48	2.92	26.97	116.5	1.020
					600	5.19	34.29	0.31	2.99	27.11	103.1	1.130
					700	4.71	34.34	0.30	3.00	27.21	94.5	1.229
					800	4.34	34.39	0.35	2.99	27.29	87.4	1.320
					1000	3.86	34.47	0.56	2.95	27.40	77.7	1.484

808 HORIZON; August 20, 1949; 1038 GCT; 31°47'N, 125°38'W; sounding, missing; wind, 350°, force 5; weather, partly cloudy; sea, rough; wire angle, 34°.

0	18.80	33.42	5.31	0.52	0	18.80	33.42	5.31	0.52	23.89	403.1	0.000
8	18.38	33.40	5.26	0.52	10	18.37	33.40	5.26	0.52	23.98	394.6	0.040
20	18.35	33.40	5.25	0.52	20	18.35	33.40	5.25	0.52	23.98	394.5	0.079
42	15.71	33.35	5.74	0.53	30	17.65	33.38	5.28	0.52	24.14	380.0	0.118
63	13.88	33.30	5.73	0.58	50	14.86	33.33	5.74	0.55	24.74	323.3	0.188
83	12.60	33.13	5.80	0.64	75	13.00	33.15	5.76	0.61	24.98	300.5	0.266
125	11.53	33.29	5.25	0.94	100	12.06	33.18	5.76	0.73	25.19	281.4	0.339
147	11.00[a]	33.40	4.67	1.28	150	10.88	33.43	4.60	1.31	25.60	243.4	0.470
252	8.50	33.96	2.50	2.32	200	9.42	33.75	3.48	1.94	26.09	196.7	0.581
516	6.10	34.29	0.38	3.23	250	8.52	33.95	2.54	2.30	26.39	168.9	0.672
786	4.76	34.40	0.40	3.32	300	7.87	34.06	1.73	2.51	26.58	151.9	0.752
1180	3.56	34.51	0.78	3.20	400	6.94	34.19	0.71	2.88	26.81	130.9	0.893
					500	6.23	34.28	0.39	3.20	26.98	114.8	1.016
					600	5.61	34.33	0.39	3.29	27.09	105.6	1.126
					700	5.08	34.37	0.39	3.31	27.19	96.8	1.227
					800	4.65	34.41	0.40	3.32	27.27	89.6	1.321
					1000	4.00	34.46	0.56	3.26	27.38	80.0	1.490

809 HORIZON; August 20, 1949; 0435 GCT; 31°29'N, 126°20'W; sounding, missing; wind, 360°, force 4; weather, partly cloudy; sea, rough; wire angle, 30°.

0	19.40	33.39	5.27	0.46	0	19.40	33.39	5.27	0.46	23.71	419.9	0.000
8	19.07	33.40	5.10	0.46	10	19.07	33.40	5.10	0.46	23.80	411.3	0.042
21	19.06	33.39	5.19	0.47	20	19.06	33.39	5.19	0.47	23.80	412.0	0.083
43	18.19	33.39	5.30	0.44	30	18.96	33.39	5.24	0.47	23.82	409.9	0.124
65	15.37	33.33	5.75	0.45	50	17.10	33.37	5.44	0.44	24.26	368.8	0.202
86	-	33.40	5.24	0.47	75	14.21	33.35	5.63	0.45	24.89	309.4	0.286
126	10.66	33.44	4.61	1.23	100	12.15	33.41	4.98	0.60	25.35	266.3	0.359
163	9.24	33.60	3.84	1.49	150	9.55	33.57	4.07	1.40	25.93	211.3	0.477
414	6.03	34.05	1.59	2.50	200	8.52	33.78	3.48	1.65	26.26	180.6	0.576
704	4.86	34.40	0.37	3.11	250	7.70	33.88	2.99	1.90	26.46	162.3	0.661
1123	3.55	34.51	1.13	2.90	300	7.05	33.94	2.53	2.11	26.60	149.3	0.739
					400	6.13	34.03	1.71	2.47	26.79	131.8	0.880
					500	5.65	34.16	1.05	2.75	26.96	117.3	1.004
					600	5.24	34.29	0.57	2.99	27.11	103.8	1.115
					700	4.88	34.40	0.37	3.11	27.24	92.1	1.213
					800	4.53	34.45	0.41	3.10	27.32	85.1	1.301
					1000	3.91	34.50	0.74	2.98	27.42	76.2	1.462

a) Left thermometer reading of 10.85° rejected.

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

HORIZON; August 19, 1949; 2224 GCT; 31°11'N, 127°03'W; sounding, missing; wind, 360°, force 4; weather, clear; sea, rough; wire angle, 24°. 810

0	19.1	33.48	5.18	0.46	0	19.1	33.48	5.18	0.46	23.86	406.4	0.000
9	19.09	33.52	5.24	0.50	10	19.07	33.52	5.24	0.50	23.89	402.7	0.040
22	18.96	33.46	5.18	0.49	20	19.00	33.47	5.18	0.49	23.87	404.8	0.081
30p	18.77	33.42	5.30	0.52	30	18.77	33.42	5.30	0.52	23.89	403.2	0.121
45	16.46	33.21	5.55	0.50	50	15.75	33.21	5.64	0.49	24.45	350.8	0.197
68	13.91	33.28	5.94	0.46	75	13.49	33.30	5.90	0.48	25.00	299.1	0.278
135	10.71	33.40	4.80	1.19	100	12.25	33.34	5.54	0.70	25.28	273.2	0.349
180	9.18	33.64	3.82	1.72	150	10.20	33.47	4.42	1.40	25.75	229.1	0.475
268	7.75	33.95	3.40	1.95	200	8.75	33.74	3.70	1.78	26.19	186.9	0.579
352	6.60	34.02	2.04	2.48	250	8.00	33.92	3.49	1.89	26.45	163.5	0.666
523	5.38	34.16	0.64	3.07	300	7.28	33.98	3.13	2.12	26.60	149.4	0.744
794u	- a)	34.38	0.42	3.23	400	6.14	34.06	1.33	2.71	26.82	129.6	0.884
1077	3.73	34.51	0.80	3.18	500	5.46	34.14	0.72	3.03	26.96	116.4	1.007
					600	5.09	34.24	0.50	3.16	27.09	105.5	1.118
					700	4.76	34.32	0.44	3.22	27.19	96.6	1.219
					800	4.46	34.38	0.42	3.23	27.27	89.3	1.312
					1000	3.91	34.48	0.65	3.21	27.40	77.7	1.479

CREST; August 17, 1949; 0436 GCT; 32°38'N, 118°10'W; sounding, missing; wind, 315°, force 5; weather, partly cloudy; sea, rough; wire angle, 06°. 901

0	18.5	33.58	5.67	0.53	0	18.5	33.58	5.67	0.53	24.08	384.4	0.000
10	17.92	33.55	5.60	0.48	10	17.92	33.55	5.60	0.48	24.20	373.3	0.038
25	14.84	33.44	5.91	0.56	20	16.25	33.48	5.81	0.54	24.54	341.0	0.074
49	12.65	33.31	5.87	0.63	30	14.25	33.41	5.93	0.58	24.93	304.7	0.106
74	11.19	33.39	5.20	1.10	50	12.55	33.31	5.86	0.64	25.19	279.8	0.164
98	10.22	33.46	4.14	1.50	75	11.14	33.39	5.18	1.10	25.52	249.4	0.230
146	8.95	33.84	3.06	1.93	100	10.13	33.46	4.08	1.51	25.75	227.8	0.290
194	8.23	-	2.67	2.11	150	8.87	33.85	3.02	1.95	26.26	179.9	0.392
289	7.40	34.07	1.58	2.52	200	8.14	33.95	2.62	2.14	26.45	162.4	0.477
384	7.11	34.25	0.58	2.87	250	7.66	34.02	2.19	2.35	26.58	151.1	0.556
575	5.82	34.33	0.33	3.01	300	7.38	34.09	1.39	2.56	26.67	142.6	0.629
864	4.53	34.42	0.41	3.13	400	7.03	34.27	0.50	2.90	26.86	126.1	0.764
1280	3.26	34.52	0.96	3.09	500	6.29	34.30	0.36	2.98	26.98	115.2	0.884
					600	5.69	34.34	0.33	3.02	27.09	105.9	0.995
					700	5.22	34.37	0.35	3.07	27.17	98.6	1.097
					800	4.79	34.40	0.40	3.12	27.25	92.2	1.192
					1000	4.07	34.45	0.55	3.13	27.36	81.5	1.366

CREST; August 16, 1949; 2124 GCT; 32°18'N, 118°51'W; sounding, missing; wind, 320°, force 5; weather, partly cloudy; sea, very rough; wire angle, 20°. 902

0	18.0	33.73	5.57	0.52	0	18.0	33.73	5.57	0.52	24.32	361.7	0.000
9	17.42	33.71	5.58	0.51	10	17.40	33.70	5.60	0.51	24.44	350.4	0.036
23	17.14	33.69	5.61	0.51	20	17.25	33.69	5.61	0.51	24.47	347.9	0.070
45	12.47	33.64	5.66	1.15	30	16.10	33.68	5.64	0.53	24.73	323.6	0.104
68	9.70	33.62	3.77	1.76	50	11.41	33.63	5.57	1.30	25.66	235.8	0.160
90	9.20	33.77	3.14	1.97	75	9.41	33.63	3.50	1.86	26.00	203.3	0.215
134	8.84	33.93	2.35	2.17	100	9.14	33.85	2.85	2.03	26.22	183.0	0.263
178	8.06	34.02	2.29	2.35	150	8.55	33.96	2.32	2.24	26.40	167.0	0.351
267	7.49	34.18	1.08	2.69	200	7.90	34.07	2.02	2.44	26.58	149.9	0.430
356	6.85	34.23	0.76	2.87	250	7.59	34.16	1.27	2.64	26.70	139.8	0.502
537	5.76	34.34	0.35	3.04	300	7.26	34.20	0.89	2.77	26.78	132.9	0.570
815	4.57	34.42	0.42	3.07	400	6.55	34.27	0.63	2.93	26.93	119.7	0.696
1104	3.66	34.51	0.72	3.12	500	5.96	34.33	0.39	3.02	27.05	108.6	0.810
					600	5.44	34.36	0.35	3.05	27.14	101.3	0.916
					700	5.00	34.38	0.36	3.06	27.21	95.1	1.013
					800	4.62	34.42	0.41	3.07	27.28	88.5	1.106
					1000	3.95	34.48	0.60	3.11	27.40	78.1	1.273

a) Readings 4.98° and 5.27° rejected.

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

903 CREST; August 16, 1949; 1524 GCT; 31°54'N, 119°31'W; sounding, missing; wind, 320°, force 5; weather, cloudy; sea, very rough; wire angle, 30°.

0	17.5	33.77	5.53	0.52	0	17.5	33.77	5.53	0.52	24.47	347.1	0.000
8	17.04	33.75	5.66	0.51	10	17.04	33.75	5.66	0.51	24.56	338.9	0.034
21	17.04	33.75	5.65	0.53	20	17.04	33.75	5.65	0.53	24.57	338.8	0.068
43	13.35	33.66	5.47	0.96	30	16.95	33.74	5.61	0.56	24.58	337.9	0.102
64	10.28	33.71	3.88	1.76	50	11.70	33.66	5.05	1.23	25.62	238.7	0.160
85	9.61	33.78	3.13	1.99	75	9.84	33.74	3.45	1.90	26.02	202.0	0.215
126	8.84	33.98	2.27	2.27	100	9.28	33.87	2.76	2.11	26.21	183.6	0.263
167	8.30	34.07	1.71	2.43	150	8.51	34.04	1.93	2.37	26.46	160.5	0.349
248	7.50	34.16	1.47	2.60	200	7.95	34.11	1.59	2.51	26.61	147.6	0.426
330	6.64	34.23	0.78	2.87	250	7.45	34.16	1.45	2.60	26.72	137.7	0.497
501	5.88	34.29	0.42	3.03	300	6.93	34.21	1.07	2.79	26.83	127.6	0.563
768	4.59	34.42	0.48	3.15	400	6.28	34.25	0.50	2.97	26.95	117.5	0.686
1165	3.44	34.51	0.86	3.14	500	5.90	34.29	0.42	3.03	27.03	110.9	0.800
					600	5.33	34.35	0.42	3.08	27.14	100.4	0.906
					700	4.86	34.39	0.44	3.12	27.23	92.6	1.003
					800	4.48	34.43	0.51	3.15	27.31	85.8	1.092
					1000	3.85	34.48	0.70	3.15	27.41	76.9	1.254

904 CREST; August 16, 1949; 0843 GCT; 31°45'N, 120°13'W; sounding, missing; wind, 350°, force 4; weather, partly cloudy; sea, very rough; wire angle, 20°.

0	17.0	33.40	5.74	0.59	0	17.0	33.40	5.74	0.59	24.31	363.0	0.000
9	16.30	33.33	5.72	0.50	10	16.30	33.33	5.71	0.50	24.42	353.0	0.036
23	16.30	33.33	5.85	0.52	20	16.30	33.33	5.79	0.51	24.42	353.1	0.071
46	15.36	33.28	6.03	0.54	30	16.25	33.32	5.89	0.52	24.42	352.9	0.106
67	12.42	33.19	6.07	0.72	50	14.45	33.24	6.05	0.55	24.76	321.6	0.174
89	11.27	33.22	5.60	0.97	75	12.05	33.19	6.01	0.81	25.20	280.0	0.249
132	9.26	33.66	3.84	1.70	100	10.62	33.35	5.30	1.10	25.58	243.9	0.315
174	8.75	33.93	2.70	2.10	150	9.02	33.80	3.20	1.90	26.20	185.9	0.422
258	7.71	34.14	1.60	2.50	200	8.39	34.03	2.25	2.26	26.48	160.0	0.508
343	7.10	34.22	0.97	2.75	250	7.78	34.13	1.68	2.47	26.64	144.7	0.584
515	6.06	34.33	0.42	3.05	300	7.37	34.18	1.27	2.64	26.74	135.9	0.655
780	4.76	34.42	0.36	3.14	400	6.74	34.27	0.66	2.89	26.90	122.1	0.784
1173	3.59	34.51	0.79	3.06	500	6.17	34.32	0.43	3.04	27.02	112.2	0.901
					600	5.56	34.37	0.39	3.10	27.13	101.9	1.008
					700	5.07	34.40	0.37	3.13	27.20	94.5	1.106
					800	4.67	34.43	0.37	3.14	27.28	88.4	1.198
					1000	4.03	34.48	0.55	3.10	27.39	78.9	1.365

905 CREST; August 16, 1949; 0300 GCT; 31°23'N, 120°54'W; sounding, missing; wind, 340°, force 3; weather, partly cloudy; sea, rough; wire angle, 0°.

0	18.0	33.62	5.72	0.62	0	18.0	33.62	5.72	0.62	24.24	369.0	0.000
10	17.14	33.53	5.74	0.52	10	17.14	33.53	5.74	0.52	24.37	357.3	0.036
25	15.88	33.48	6.08	0.52	20	16.55	33.50	6.01	0.52	24.49	346.1	0.072
50	12.47	33.35	5.70	0.80	30	15.00	33.45	6.06	0.52	24.80	317.0	0.105
75	11.22	33.48	4.87	1.22	50	12.47	33.35	5.70	0.80	25.24	275.4	0.164
100	10.12	33.58	4.03	1.65	75	11.22	33.48	4.87	1.22	25.57	244.1	0.229
150	8.87	33.91	2.88	2.11	100	10.12	33.58	4.03	1.65	25.85	218.4	0.287
199	8.27	34.05	2.19	2.35	150	8.87	33.91	2.88	2.11	26.31	175.1	0.385
298	7.67	34.25	0.97	2.86	200	8.25	34.05	2.14	2.36	26.51	156.5	0.468
397	6.74	34.25	0.66	3.02	250	7.94	34.20	1.41	2.62	26.68	141.9	0.543
595	5.46	34.34	0.34	3.16	300	7.64	34.25	0.95	2.87	26.76	134.6	0.611
891	4.19	34.47	0.55	3.24	400	6.71	34.25	0.66	3.02	26.89	123.2	0.740
1311	3.23	34.54	0.98	3.13	500	6.03	34.29	0.44	3.11	27.01	112.6	0.858
					600	5.43	34.34	0.35	3.16	27.12	102.5	0.966
					700	4.94	34.40	0.39	3.19	27.23	92.8	1.063
					800	4.52	34.44	0.48	3.22	27.31	85.7	1.152
					1000	3.87	34.50	0.63	3.22	27.42	75.7	1.315

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

CREST; August 15, 1949; 2000 GCT; 31°08'N, 121°34'W; sounding, missing; wind, 350°, force 3; weather, cloudy; sea, rough; wire angle, 25°. 906

0	18.0	33.39	5.70	0.51	0	18.0	33.39	5.70	0.51	24.06	386.7	0.000
9	17.49	33.39	5.65	0.48	10	17.48	33.39	5.64	0.48	24.18	375.1	0.038
22	17.47	33.40	5.56	0.50	20	17.46	33.40	5.57	0.50	24.20	373.7	0.076
43	14.70	33.33	6.04	0.47	30	17.45	33.39	5.85	0.49	24.19	374.7	0.113
64	12.77	33.37	5.92	0.62	50	13.82	33.34	6.02	0.48	24.96	301.7	0.181
86	11.73	33.40	5.39	0.98	75	12.25	33.38	5.72	0.77	25.31	269.7	0.252
127	9.80	33.62	3.75	1.72	100	10.90	33.45	4.75	1.21	25.61	241.4	0.316
169	8.78	33.91	2.83	2.10	150	9.18	33.77	3.19	2.03	26.15	190.6	0.424
252	7.65	34.13	1.95	2.43	200	8.32	34.05	2.42	2.29	26.50	157.6	0.511
336	6.78	34.16	1.13	2.77	250	7.65	34.13	1.95	2.43	26.66	142.9	0.586
504	5.86	34.29	0.40	3.07	300	7.09	34.14	1.44	2.63	26.75	135.0	0.656
760	4.65	34.40	0.40	3.26	400	6.40	34.23	0.70	2.89	26.92	120.7	0.783
1155	3.52	34.56	0.83	3.07	500	5.88	34.28	0.43	3.06	27.02	111.4	0.900
					600	5.33	34.34	0.40	3.18	27.14	101.2	1.006
					700	4.87	34.37	0.40	3.25	27.21	94.2	1.103
					800	4.50	34.42	0.42	3.26	27.30	86.9	1.194
					1000	3.89	34.50	0.60	3.16	27.42	75.4	1.356

CREST; August 15, 1949; 1210 GCT; 30°49'N, 122°15'W; sounding, missing; wind, 360°, force 4; weather, overcast; sea, rough; wire angle, 5°. 907

0	18.4	33.46	5.52	0.55	0	18.4	33.46	5.52	0.55	24.02	390.6	0.000
10	17.95	33.49	5.82	0.58	10	17.95	33.49	5.82	0.58	24.15	378.6	0.038
25	17.97	33.51	5.53	0.53	20	17.96	33.50	5.60	0.55	24.16	378.0	0.076
50	16.25	33.44	5.80	0.51	30	17.94	33.51	5.58	0.52	24.17	377.4	0.114
75	13.44	33.37	6.07	0.61	50	16.25	33.44	5.80	0.51	24.51	345.0	0.186
100	11.92	33.40	5.45	0.97	75	13.44	33.37	6.07	0.61	25.06	292.9	0.266
147	10.14	33.58	3.90	1.65	100	11.92	33.40	5.45	0.97	25.38	262.6	0.336
195	9.06	33.89	3.04	2.02	150	10.03	33.60	3.82	1.69	25.88	216.8	0.455
290	7.42	34.09	1.97	2.49	200	8.95	33.91	2.97	2.06	26.29	177.5	0.554
385	6.44	34.13	0.86	2.76	250	8.03	34.05	2.42	2.33	26.55	154.2	0.637
579	5.36	34.29	0.63	3.19	300	7.30	34.09	1.82	2.52	26.68	141.5	0.711
870	4.30	34.47	0.49	3.35	400	6.33	34.14	0.81	2.80	26.85	126.4	0.844
1283	3.22	34.54	0.96	3.21	500	5.71	34.22	0.70	3.04	26.99	113.8	0.964
					600	5.27	34.31	0.61	3.22	27.12	102.7	1.072
					700	4.89	34.39	0.55	3.30	27.23	92.9	1.170
					800	4.53	34.44	0.50	3.34	27.31	85.7	1.259
					1000	3.88	34.50	0.57	3.33	27.42	75.8	1.422

CREST; August 15, 1949; 0639 GCT; 30°30'N, 122°55'W; sounding, missing; wind, 360°, force 4; weather, partly cloudy; sea, rough; wire angle, 5°. 908

0	18.4	33.33	5.62	0.59	0	18.4	33.33	5.62	0.59	23.92	400.0	0.000
10	17.99	33.33	5.52	0.51	10	17.99	33.33	5.52	0.51	24.02	391.2	0.040
24	18.00	33.31	5.55	0.47	20	18.00	33.32	5.54	0.48	24.01	392.2	0.079
49	15.71	33.30	6.01	0.45	30	17.99	33.30	5.61	0.46	23.99	393.7	0.118
73	13.76	33.37	6.13	0.49	50	15.55	33.30	6.03	0.45	24.56	340.0	0.191
97	13.22	33.40	5.97	0.52	75	13.70	33.37	6.12	0.49	25.01	297.9	0.271
145	10.66	33.39	5.08	1.15	100	13.10	33.40	5.91	0.52	25.16	284.7	0.344
192	8.95	33.69	3.78	1.76	150	10.36	33.40	4.99	1.22	25.66	236.9	0.474
284	7.76	34.05	2.12	2.52	200	8.80	33.75	3.60	1.88	26.19	187.0	0.581
378	6.63	34.14	1.07	2.82	250	8.16	33.99	2.64	2.33	26.48	160.6	0.667
567	5.68	34.31	0.35	3.14	300	7.53	34.07	1.88	2.59	26.63	146.3	0.744
853	4.39	34.45	0.48	3.23	400	6.49	34.16	0.91	2.86	26.85	126.9	0.880
1271	3.28	34.53	1.01	3.06	500	6.00	34.26	0.47	3.05	26.99	114.4	1.001
					600	5.50	34.33	0.35	3.16	27.11	104.1	1.110
					700	4.99	34.39	0.36	3.20	27.22	94.1	1.209
					800	4.58	34.43	0.42	3.22	27.30	87.1	1.300
					1000	3.93	34.49	0.63	3.19	27.41	77.1	1.464

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

909 CREST; August 15, 1949; 0040 GCT; 30°10'N, 123°39'W; sounding, missing; wind, 360°, force 3; weather, partly cloudy; sea, rough; wire angle, 0°.

0	19.00	33.39	5.54	0.53	0	19.00	33.39	5.54	0.53	23.81	410.0	0.000
10	18.39	33.37	5.54	0.49	10	18.39	33.37	5.54	0.49	23.95	397.6	0.040
25	18.35	33.39	5.57	0.48	20	18.37	33.38	5.56	0.48	23.96	396.3	0.080
49	16.29	33.48	5.97	0.45	30	18.30	33.40	5.65	0.48	24.00	393.6	0.120
72	14.64	33.58	6.11	0.42	50	16.10	33.48	5.98	0.45	24.58	338.8	0.193
96	14.24	33.64	6.04	0.43	75	14.58	33.59	6.10	0.42	24.99	299.5	0.273
142	12.02	33.55	5.39	0.88	100	14.20	33.64	6.00	0.44	25.11	288.7	0.346
188	9.36	33.64	4.38	1.60	150	11.31	33.56	5.15	1.02	25.62	241.3	0.478
280	8.00	34.02	3.29	2.17	200	9.15	33.70	4.25	1.69	26.10	196.1	0.588
372	6.70	34.07	1.98	2.56	250	8.41	33.97	3.66	2.01	26.43	165.7	0.678
557	5.54	34.23	0.51	3.12	300	7.67	34.03	3.00	2.25	26.58	151.4	0.757
837	4.25	34.38	0.53	3.19	400	6.45	34.11	1.58	2.68	26.81	130.1	0.898
1243	3.30	34.54	1.02	3.14	500	5.85	34.20	0.72	3.01	26.96	116.9	1.022
					600	5.29	34.25	0.51	3.13	27.07	107.3	1.134
					700	4.80	34.31	0.50	3.17	27.17	97.8	1.236
					800	4.37	34.36	0.52	3.18	27.26	89.9	1.330
					1000	3.77	34.45	0.70	3.18	27.40	78.1	1.498

910 CREST; August 14, 1949; 1858 GCT; 29°56'N, 124°15'W; sounding, missing; wind, 360°, force 3; weather, overcast; sea, rough; wire angle, 8°.

0	19.80	33.73	5.40	0.56	0	19.80	33.73	5.40	0.56	23.87	404.9	0.000
10	19.04	33.68	5.38	0.53	10	19.04	33.68	5.38	0.53	24.02	390.5	0.040
24	19.04	33.69	5.35	0.55	20	19.05	33.69	5.34	0.54	24.03	390.1	0.079
48	18.56	33.92r	5.58	0.47	30	19.02	33.68	5.35	0.53	24.03	390.5	0.118
71	15.06	33.58	6.10	0.48	50	17.75	33.62	5.61	0.47	24.30	365.4	0.194
95	14.66	33.69	5.76	0.48	75	14.92	33.59	6.08	0.48	24.92	306.2	0.277
141	13.84	33.84	5.34	0.75	100	14.64	33.71	5.69	0.48	25.08	292.4	0.352
187	10.61	33.71	4.58	1.36	150	12.80	33.83	5.20	0.87	25.55	248.6	0.487
278	7.91	34.01	3.20	2.18	200	10.10	33.77	4.31	1.50	26.00	206.3	0.602
370	6.76	34.09	1.87	2.68	250	8.58	33.98	3.59	1.97	26.41	167.7	0.695
555	5.39	34.29	0.56	3.29	300	7.55	34.03	2.87	2.32	26.60	149.6	0.774
836	4.33	34.40	0.50	3.30	400	6.48	34.13	1.47	2.81	26.83	128.9	0.913
1247	3.26	34.54	1.00	3.28	500	5.75	34.25	0.69	3.19	27.01	112.0	1.034
					600	5.20	34.31	0.53	3.30	27.13	101.6	1.141
					700	4.79	34.35	0.50	3.30	27.21	94.8	1.239
					800	4.44	34.39	0.50	3.30	27.28	88.4	1.330
					1000	3.85	34.46	0.63	3.29	27.39	78.2	1.497

911 CREST; August 14, 1949; 1325 GCT; 29°34'N, 124°57'W; sounding, missing; wind, 360°, force 4; weather, cloudy; sea, moderate; wire angle, 3°.

0	19.70	33.89	5.04	0.51	0	19.70	33.89	5.04	0.51	24.01	391.0	0.000
10	19.21	33.82	5.10	0.44	10	19.21	33.82	5.10	0.44	24.09	384.2	0.039
25	19.20	33.82	5.23	0.46	20	19.20	33.82	5.18	0.45	24.09	384.4	0.077
50	17.04	33.82	5.79	0.40	30	19.17	33.82	5.31	0.45	24.10	383.9	0.116
75	15.56	33.78	5.86	0.49	50	17.04	33.82	5.79	0.40	24.62	334.8	0.188
99	14.73	33.66	5.73	0.45	75	15.56	33.78	5.86	0.49	24.93	305.3	0.268
148	12.86	33.66	5.16	0.85	100	14.72	33.66	5.72	0.45	25.02	297.7	0.343
196	9.40	33.69	4.00	1.66	150	12.60	33.66	5.12	0.90	25.45	257.4	0.481
293	8.17	34.07	2.79	2.23	200	9.32	33.70	3.95	1.70	26.07	198.8	0.596
389	6.96	34.13	1.27	2.72	250	8.63	33.93	3.32	2.01	26.36	172.0	0.689
583	5.53	34.25	0.41	3.17	300	8.06	34.08	2.66	2.26	26.56	153.3	0.770
876	4.30	34.40	0.50	3.28	400	6.87	34.13	1.14	2.77	26.77	134.4	0.914
1296	3.20	34.51	1.04	3.28	500	6.09	34.20	0.54	3.04	26.93	119.9	1.041
					600	5.45	34.26	0.41	3.18	27.06	108.7	1.155
					700	4.96	34.32	0.42	3.25	27.16	98.9	1.259
					800	4.56	34.37	0.46	3.27	27.25	91.4	1.354
					1000	3.92	34.44	0.63	3.28	27.37	80.6	1.526

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

CREST; August 11, 1949; 1313 GCT; 31°18'N, 116°58'W; sounding, missing; wind, 315°, force 4; weather, cloudy; sea, moderate; wire angle, 0°. 1001

0	19.60	33.71	5.55	0.35	0	19.60	33.71	5.55	0.35	23.90	401.6	0.000	
10	18.95	33.69	5.51	0.34	10	18.95	33.69	5.51	0.34	24.05	387.4	0.039	
25	15.01	33.48	6.24	0.34	20	18.91	33.54	6.06	0.34	23.95	397.6	0.079	
50	12.13	33.39	5.80	0.65	30	14.08	33.44	6.20	0.34	24.99	299.2	0.114	
75	10.76	33.62	3.76	1.43	50	12.13	33.39	5.80	0.65	25.33	266.5	0.170	
100	10.42	33.70	3.41	1.62	75	10.76	33.62	3.76	1.43	25.77	225.1	0.232	
150	11.40r	34.00	1.92	2.02	100	10.42	33.70	3.41	1.62	25.89	214.7	0.286	
200	9.33	34.22	1.40	2.24	150	9.94	34.00	1.92	2.02	26.20	185.6	0.387	
300	7.36	34.23	0.81	2.54	200	9.33	34.22	1.40	2.24	26.47	160.6	0.473	
400	6.76[a]	34.34	0.41	2.72	250	8.20	34.23	1.11	2.41	26.66	143.6	0.550	
600	5.47	34.35	0.32	2.90	300	7.36	34.23	0.81	2.54	26.79	132.7	0.618	
					400	6.76	34.34	0.41	2.72	26.96	117.0	0.743	
					500	6.17	34.35	0.37	2.82	27.04	109.9	0.856	
					600	5.47	34.35	0.32	2.90	27.13	102.1	0.962	

CREST; August 11, 1949; 1758 GCT; 30°59'N, 117°33'W; sounding, missing; wind, 310°, force 4; weather, cloudy; sea, rough; wire angle, 10°. 1002

0	19.00	33.64	5.57	0.41	0	19.00	33.64	5.57	0.41	24.00	392.0	0.000	
10	18.21	33.61	5.55	0.40	10	18.21	33.61	5.55	0.40	24.18	375.5	0.038	
24	17.76	33.57	5.42	0.38	20	17.90	33.58	5.45	0.39	24.23	371.0	0.076	
48	13.17	33.42	5.49	0.55	30	17.50	33.52	5.45	0.39	24.28	366.5	0.113	
70	11.19	33.42	4.42	1.04	50	12.90	33.42	5.46	0.59	25.21	278.1	0.177	
93	10.13	33.64	3.16	1.55	75	10.92	33.43	3.74	1.15	25.59	242.6	0.242	
137	9.64	33.89	2.60	1.79	100	10.02	33.71	3.03	1.62	25.96	207.4	0.298	
182	9.66	34.22	1.50	2.21	150	9.64	33.99	2.34	1.88	26.25	181.6	0.396	
275	8.85	34.31	1.02	2.44	200	9.57	34.26	1.30	2.29	26.47	161.4	0.481	
368	7.64	34.28	0.94	2.54	250	9.14	34.31	1.06	2.40	26.58	151.7	0.560	
558	5.98	34.29	0.43	2.85	300	8.55	34.30	1.00	2.46	26.66	144.4	0.634	
848	4.68	34.42	0.37	2.87	400	7.25	34.28	0.84	2.59	26.84	128.4	0.770	
1266	3.39	34.49	0.92	2.81	500	6.34	34.28	0.50	2.78	26.96	117.4	0.893	
					600	5.76	34.31	0.41	2.87	27.06	108.9	1.006	
					700	5.30	34.37	0.39	2.87	27.16	99.6	1.111	
					800	4.88	34.41	0.38	2.87	27.24	92.5	1.207	
					1000	4.16	34.46	0.52	2.86	27.36	81.9	1.381	

CREST; August 11, 1949; 2327 GCT; 30°36'N, 118°12'W; sounding, missing; wind, 310°, force 4; weather, cloudy; sea, rough; wire angle, 20°. 1003

0	19.0	33.69	5.46	0.41	0	19.0	33.69	5.46	0.41	24.04	388.3	0.000	
9	18.97	33.68	5.31	0.38	10	18.95	33.68	5.31	0.38	24.05	387.9	0.039	
22	18.78	33.60	5.46	0.35	20	18.80	33.61	5.41	0.35	24.03	389.9	0.078	
44	16.06	33.54	6.03	0.37	30	18.45	33.57	5.70	0.36	24.09	384.7	0.116	
66	12.82	33.40	5.85	0.52	50	14.78	33.52	6.01	0.38	24.90	307.7	0.186	
88	11.06	33.52	4.29	1.12	75	11.96	33.40	5.25	0.82	25.38	262.8	0.257	
131	9.49	33.82	3.18	1.67	100	10.35	33.62	3.89	1.30	25.84	219.5	0.317	
175	9.06	34.09	2.13	2.02	150	9.25	33.94	2.85	1.84	26.27	179.1	0.417	
263	8.70	34.31	1.04	2.38	200	8.94	34.19	1.61	2.15	26.51	156.7	0.501	
353	7.76	34.31	0.76	2.57	250	8.76	34.30	1.11	2.34	26.63	146.6	0.576	
534	6.01	34.33	0.39	2.81	300	8.36	34.31	0.89	2.47	26.70	140.9	0.649	
812	4.66	34.25r	0.36	2.89	400	7.26	34.31	0.66	2.65	26.86	126.2	0.782	
1228	3.42	34.55	0.83	2.84	500	6.31	34.32	0.44	2.78	27.00	114.1	0.902	
					600	5.59	34.36	0.37	2.85	27.12	103.0	1.011	
					700	5.09	34.40	0.36	2.88	27.21	94.7	1.110	
					800	4.70	34.44	0.36	2.89	27.29	88.1	1.201	
					1000	4.01	34.49	0.41	2.87	27.40	78.0	1.367	

a) Middle thermometer reading of 7.31° rejected.

SIO

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4908

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

1004 CREST; August 12, 1949; 0517 GCT; 30°16'N, 118°50'W; sounding, missing; wind 310°, force 4; weather, cloudy; sea, indeterminate; wire angle, 35°.

0	19.0	33.58	5.54	0.43	0	19.0	33.58	5.54	0.43	23.96	396.3	0.000
8	18.33	33.57	5.61	0.37	10	18.33	33.57	5.59	0.37	24.12	381.4	0.039
20	18.33	33.58	5.46	0.36	20	18.33	33.58	5.46	0.36	24.13	380.9	0.077
39	15.89	33.42	6.04	0.34	30	18.23	33.56	5.80	0.35	24.14	380.3	0.115
58	13.74	33.39	6.11	0.36	50	14.12	33.40	6.09	0.35	24.95	303.4	0.183
77	13.16	33.40	6.05	0.42	75	13.20	33.40	6.06	0.41	25.13	286.0	0.257
115	10.51	33.42	4.84	1.06	100	12.00	33.40	5.56	0.69	25.37	264.2	0.326
152	9.16	33.77	3.55	1.69	150	9.20	33.72	3.57	1.69	26.11	194.7	0.441
228	8.41	34.11	2.23	2.26	200	8.66	34.04	2.58	2.16	26.44	163.4	0.530
305	7.70	34.20	1.28	2.44	250	8.19	34.14	1.94	2.32	26.59	149.9	0.608
462	6.53	34.29	0.46	2.71	300	7.74	34.20	1.32	2.43	26.70	139.9	0.681
704	5.03	34.36	0.32	2.84	400	6.99	34.26	0.64	2.62	26.86	126.2	0.814
1085	3.68	34.47	0.75	2.77	500	6.27	34.30	0.39	2.75	26.99	115.0	0.935
					600	5.61	34.33	0.33	2.82	27.09	105.5	1.045
					700	5.07	34.36	0.32	2.84	27.18	97.4	1.146
					800	4.61	34.39	0.37	2.84	27.26	91.5	1.241
					1000	3.92	34.45	0.61	2.79	27.38	80.8	1.413

1005 CREST; August 12, 1949; 1055 GCT; 29°50.5'N, 119°33'W; sounding, missing; wind, 330°, force 5; weather, cloudy; sea, very rough; wire angle, 35°.

0	18.9	33.51	5.50	0.46	0	18.9	33.51	5.50	0.46	23.93	399.0	0.000
8	18.32	33.46	5.27	0.44	10	18.32	33.46	5.27	0.43	24.04	389.2	0.039
21	18.33	33.53	5.38	0.42	20	18.33	33.52	5.36	0.42	24.08	385.4	0.078
42	17.62	33.75	5.79	0.33	30	18.30	33.61	5.53	0.38	24.16	378.4	0.116
62	14.62	33.55	5.73	0.36	50	15.31	33.70	5.79	0.35	24.92	305.7	0.185
84	14.32	33.66	5.82	0.36	75	14.44	33.64	5.79	0.36	25.06	292.9	0.260
126	11.24	33.43	5.12	0.88	100	14.00	33.57	5.69	0.40	25.10	289.8	0.332
168	9.30	33.60	3.95	1.55	150	9.83	33.50	4.40	1.26	25.83	221.1	0.460
253	8.32	34.05	2.44	2.05	200	8.87	33.96	3.25	1.81	26.35	172.5	0.559
339	6.84	34.05	1.57	2.47	250	8.33	34.05	2.52	2.03	26.50	158.7	0.641
512	5.58	34.22	0.49	2.83	300	7.45	34.05	1.96	2.27	26.63	146.7	0.717
778	4.62	34.40	0.43	2.93	400	6.25	34.09	0.94	2.67	26.82	128.9	0.855
1171	3.35	34.54	0.90	2.90	500	5.63	34.21	0.51	2.82	27.00	113.5	0.976
					600	5.25	34.31	0.45	2.90	27.12	102.4	1.084
					700	4.89	34.36	0.44	2.92	27.20	95.2	1.183
					800	4.54	34.41	0.43	2.93	27.28	88.2	1.274
					1000	3.89	34.48	0.60	2.92	27.41	77.3	1.441

1006 CREST; August 12, 1949; 1806 GCT; 29°31'N, 120°07'W; sounding, missing; wind, 330°, force 5; weather, cloudy; sea, rough; wire angle, 10°.

0	19.7	33.75	5.47	0.41	0	19.7	33.75	5.47	0.41	23.91	401.1	0.000
10	19.04	33.71	5.26	0.41	10	19.04	33.71	5.26	0.41	24.05	387.9	0.039
25	19.02	33.68	5.36	0.39	20	19.03	33.68	5.33	0.40	24.03	390.3	0.078
48	18.54	33.86	5.60	0.40	30	19.00	33.69	5.40	0.39	24.03	389.7	0.117
72	15.62	33.64	5.97	0.43	50	18.12	33.86	5.64	0.40	24.39	356.5	0.192
95	14.52	33.58	5.79	0.44	75	15.39	33.63	5.96	0.43	24.85	313.1	0.276
142	12.94	33.53	5.13	0.73	100	14.31	33.57	5.75	0.44	25.04	296.1	0.352
188	10.00	33.89	3.09	1.79	150	12.61	33.55	4.26	0.89	25.37	265.8	0.492
281	8.17	34.09	2.62	2.09	200	9.67	33.94	3.00	1.86	26.20	186.5	0.605
374	6.84	34.09	1.44	2.50	250	8.70	34.06	2.75	2.00	26.45	163.5	0.693
562	5.33	34.27	0.47	2.87	300	7.87	34.09	2.48	2.16	26.60	149.7	0.771
844	4.30	34.42	0.50	2.91	400	6.53	34.10	1.18	2.59	26.80	131.9	0.912
1253	3.21	34.51	0.96	2.87	500	5.67	34.21	0.59	2.81	26.99	114.0	1.035
					600	5.17	34.30	0.47	2.88	27.12	102.2	1.143
					700	4.80	34.36	0.47	2.89	27.21	94.1	1.241
					800	4.45	34.40	0.49	2.91	27.29	87.9	1.332
					1000	3.85	34.46	0.62	2.89	27.40	78.3	1.498

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

CREST;August 12, 1949; 2345 GCT; 29°08.5'N, 120°46'W; sounding, missing; wind, 330°, force 4; weather, cloudy; sea, very rough; wire angle, 12°. 1007

0	20.2	34.02	5.38	0.37	0	20.2	34.02	5.38	0.37	23.98	393.8	0.000
9	19.71	33.93	5.41	0.34	10	19.70	33.93	5.41	0.34	24.04	388.7	0.039
23	19.68	34.00	5.34	0.34	20	19.68	33.99	5.36	0.34	24.09	383.9	0.078
46	18.70	33.89	5.64	0.30	30	19.63	33.99	5.38	0.33	24.11	383.0	0.116
69	16.10	33.69	5.90	0.37	50	18.02	33.84	5.69	0.31	24.40	355.7	0.190
92	14.86	33.62	5.92	0.38	75	15.70	33.66	5.93	0.37	24.81	317.5	0.274
138	13.38	33.57	5.22	0.63	100	14.59	33.60	5.82	0.39	25.00	299.4	0.351
183	10.62	33.65	4.25	-	150	12.92	33.57	4.94	0.77	25.32	270.1	0.493
272	8.60	34.05	2.57	2.00	200	9.97	33.74	3.90	1.29	25.99	206.4	0.612
362	7.90	34.22	1.20	2.50	250	8.87	33.97	2.96	1.79	26.35	172.8	0.708
544	5.76	34.27	0.48	2.86	300	8.34	34.12	2.05	2.25	26.55	154.6	0.789
821	4.71	34.42	0.42	2.98	400	7.46	34.24	0.85	2.58	26.78	134.1	0.934
1228	3.42	34.52	0.89	2.91	500	6.20	34.25	0.53	2.79	26.96	117.7	1.060
					600	5.44	34.31	0.46	2.91	27.10	105.0	1.171
					700	5.11	34.37	0.44	2.96	27.18	97.5	1.272
					800	4.78	34.41	0.43	2.98	27.26	91.2	1.367
					1000	4.12	34.48	0.56	2.96	27.38	80.0	1.538

CREST; August 13, 1949; 0505 GCT; 28°50'N, 121°19'W; sounding, missing; wind, 360°, force 4; weather, overcast; sea, rough; wire angle, 10°. 1008

0	20.4	34.00	5.27	0.36	0	20.4	34.00	5.27	0.36	23.91	400.4	0.000
10	19.80	33.96	5.27	0.37	10	19.80	33.96	5.27	0.37	24.04	388.6	0.039
24	19.80	33.96	5.14	0.38	20	19.80	33.96	5.16	0.38	24.04	389.0	0.078
47	18.65	33.89	5.37	0.36	30	19.81	33.95	5.16	0.38	24.03	390.3	0.117
70	16.34	33.78	5.66	0.36	50	18.02	33.89	5.43	0.36	24.44	351.9	0.192
93	15.45	33.69	5.70	0.38	75	16.07	33.76	5.70	0.36	24.80	318.3	0.275
139	13.42	33.68	5.09	0.67	100	15.26	33.68	5.66	0.40	24.92	307.3	0.353
185	10.72	33.69	4.42	1.44	150	12.37	33.68	4.92	0.85	25.51	251.7	0.493
278	8.57	34.07	2.70	2.00	200	10.22	33.70	4.13	1.60	25.92	213.3	0.609
372	7.89	34.25	1.06	2.54	250	8.95	33.81	3.19	1.85	26.22	185.9	0.710
559	5.89	34.25	0.47	2.87	300	8.39	34.17	2.20	2.11	26.59	151.4	0.794
844	4.64	34.40	0.46	2.96	400	7.61	34.25	0.87	2.63	26.76	136.0	0.937
1259	3.44	34.51	0.93	2.95	500	6.45	34.25	0.55	2.81	26.92	121.0	1.066
					600	5.68	34.27	0.46	2.90	27.04	111.1	1.182
					700	5.21	34.34	0.46	2.95	27.15	100.8	1.287
					800	4.81	34.38	0.46	2.96	27.23	94.0	1.386
					1000	4.13	34.45	0.60	2.96	27.36	82.4	1.562

CREST; August 13, 1949; 0959 GCT; 28°31'N, 121°52'W; sounding, missing; wind 310°, force 4; weather, cloudy; sea, very rough; wire angle 9°. 1009

0	20.5	33.99	5.26	0.45	0	20.5	33.99	5.26	0.45	23.88	403.6	0.000
10	20.01	34.00	5.26	0.47	10	20.01	34.00	5.26	0.47	24.02	391.1	0.040
24	20.01	34.00	5.35	0.45	20	20.02	34.00	5.32	0.46	24.02	391.5	0.079
47	16.61	33.77	6.01	0.44	30	20.00	33.90	5.48	0.45	23.94	398.8	0.118
71	15.40	33.71	6.20	0.49	50	16.36	33.75	6.06	0.44	24.73	324.3	0.191
95	14.84	33.78	5.85	0.53	75	15.23	33.71	6.18	0.49	24.95	304.1	0.269
141	13.17	33.71	5.38	0.83	100	14.79	33.78	5.78	0.54	25.10	290.3	0.343
187	10.68	33.86	3.07	1.95	150	12.31	33.72	5.25	0.97	25.56	247.5	0.478
280	8.98	34.20	1.93	2.50	200	10.36	33.96	2.81	2.10	26.10	196.5	0.589
373	7.78	34.23	1.29	2.75	250	9.43	34.15	2.16	2.40	26.40	168.3	0.680
560	6.18	34.31	0.48	3.19	300	8.68	34.22	1.81	2.56	26.58	152.2	0.760
844	4.76	34.45	0.49	3.35	400	7.50	34.23	1.06	2.83	26.77	135.8	0.904
1258	3.48	34.54	0.92	3.38	500	6.63	34.27	0.56	3.11	26.92	122.0	1.033
					600	5.93	34.34	0.49	3.23	27.06	108.9	1.149
					700	5.38	34.39	0.49	3.30	27.17	99.1	1.253
					800	4.93	34.43	0.49	3.34	27.26	91.6	1.348
					1000	4.20	34.50	0.58	3.36	27.39	79.6	1.519

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4908

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
1010	CREST; August 13, 1949; 1453 GCT; 28°12'N, 122°25'W; sounding, missing; wind 360°, force 4; weather, overcast; sea, very rough; wire angle, 7°.											
0	20.5	33.95	5.32	0.49	0	20.5	33.95	5.32	0.49	23.85	406.7	0.000
10	19.95	33.87	5.31	0.40	10	19.95	33.87	5.31	0.40	23.93	399.1	0.040
24	19.95	33.89	5.28	0.40	20	19.95	33.89	5.30	0.40	23.95	398.0	0.080
48	18.28	33.96	5.66	0.45	30	19.94	33.91	5.30	0.41	23.97	396.5	0.120
72	16.64	34.00	5.88	0.42	50	18.08	33.96	5.68	0.45	24.48	348.5	0.194
96	15.30	33.78	5.74	0.46	75	16.40	34.00	5.87	0.42	24.91	307.9	0.276
143	12.54	33.69	4.92	0.95	100	15.27	33.76	5.69	0.47	24.98	301.8	0.353
190	10.12	33.86	3.62	1.67	150	11.96	33.70	4.58	1.08	25.61	242.4	0.488
283	8.46	34.07	2.38	2.36	200	9.86	33.89	3.45	1.77	26.13	193.4	0.598
378	7.28	34.16	1.41	2.76	250	8.94	34.01	2.75	2.16	26.37	171.0	0.689
569	5.88	34.29	0.44	3.12	300	8.20	34.09	2.19	2.45	26.55	154.7	0.770
860	4.52	34.41	0.53	3.32	400	7.08	34.17	1.20	2.83	26.78	134.0	0.914
1283	3.28	34.51	0.91	3.21	500	6.34	34.25	0.57	3.04	26.94	120.4	1.042
					600	5.70	34.31	0.45	3.15	27.07	109.0	1.156
					700	5.18	34.35	0.46	3.24	27.16	99.5	1.261
					800	4.75	34.39	0.50	3.30	27.24	92.3	1.357
					1000	4.02	34.46	0.65	3.30	27.38	80.4	1.529
1011	CREST; August 13, 1949; 1928, 2105 GCT; 27°53'N, 122°58'W; sounding, missing; wind, 360°, force 4; weather, overcast; sea, very rough; wire angle, 10°, 28°.											
0	20.5	34.00	5.18	0.51	0	20.5	34.00	5.18	0.51	23.89	403.0	0.000
10	19.94	33.98	5.15	0.43	10	19.94	33.98	5.15	0.43	24.02	391.6	0.040
24	19.92	34.00	5.23	0.39	20	19.93	33.99	5.21	0.40	24.03	391.5	0.079
48	19.20	34.12	5.52	0.30	30	19.91	34.06	5.30	0.37	24.09	384.8	0.118
72	16.74	34.06	5.73	0.39	50	19.05	34.12	5.55	0.30	24.36	359.9	0.192
96	15.46	33.91	5.71	0.39	75	16.30	34.06	5.74	0.39	24.97	301.5	0.275
143	13.95	33.82	5.24	0.56	100	15.44	33.91	5.69	0.39	25.06	294.4	0.349
190	10.31	33.71	4.47	1.32	150	13.09	33.81	5.05	0.70	25.47	255.7	0.487
283	8.18	34.02	3.37	2.07	200	10.02	33.73	4.36	1.42	25.98	208.0	0.603
378	6.72	34.09	1.53	2.75	250	8.91	33.97	3.88	1.82	26.35	173.6	0.699
569	5.46	34.25	0.46	3.20	300	7.86	34.03	3.00	2.20	26.56	154.0	0.780
858	4.36	34.42	0.54	3.31	400	6.52	34.12	1.25	2.86	26.81	130.3	0.922
1272	3.26	34.52	1.03	3.13	500	5.82	34.20	0.58	3.12	26.96	116.6	1.046
					600	5.32	34.28	0.46	3.22	27.09	105.5	1.157
1780	2.40	34.61	0.82r	3.07	700	4.91	34.34	0.49	3.28	27.18	97.1	1.258
2250	1.94	34.65	2.31	2.88	800	4.56	34.39	0.50	3.30	27.27	89.9	1.352
2758	1.68	34.67	2.62	2.70	1000	3.93	34.46	0.66	3.26	27.39	79.3	1.521
3262	1.55	34.67	2.93	2.68	1200	3.43	34.51	0.96	3.16	27.48	71.1	1.672
3762	1.54	34.67	3.10	2.68	1500	2.93	34.55	1.02	3.10	27.56	64.4	1.875
					2000	2.14	34.63	1.20	2.98	27.69	51.7	2.165
					2500	1.79	34.66	2.48	2.80	27.73	47.6	2.414
					3000	1.60	34.67	2.80	2.71	27.74	46.7	2.650

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

CREST; August 11, 1949; 0030 GCT; 29°38'N, 116°03'W; sounding, missing; wind, 340°, force 4; weather, partly cloudy; sea, moderate; wire angle, 16°. 1101

0	19.8	33.69	5.44	0.46	0	19.8	33.69	5.44	0.46	23.84	407.6	0.000
10	19.05	33.67	5.36	0.39	10	19.05	33.67	5.36	0.39	24.01	391.2	0.040
24	18.68	33.64	5.22	0.37	20	18.80	33.64	5.24	0.38	24.05	387.8	0.079
47	15.69	33.49	5.70	0.42	30	18.47	33.61	5.23	0.38	24.11	382.2	0.117
71	12.64	33.42	5.60	0.62	50	14.87	33.48	5.70	0.43	24.85	312.6	0.187
94	11.71	33.42	5.13	0.91	75	12.37	33.42	5.50	0.67	25.31	269.0	0.260
139	9.60	33.62	3.87	1.57	100	11.47	33.42	5.00	0.97	25.48	253.4	0.325
261	8.64	34.22	1.44	2.26	150	9.43	33.76	3.25	1.70	26.10	195.4	0.438
275	8.40	34.22	1.46	2.33	200	9.15	34.11	1.80	2.00	26.42	165.7	0.527
365	7.24	34.27	0.79	2.64	250	8.80	34.22	1.45	2.21	26.56	153.1	0.607
431p	6.79[a]	34.34	0.32	2.81	300	8.03	34.23	1.31	2.44	26.69	141.8	0.681
749p	5.00	34.42	0.42	2.95	400	7.00	34.31	0.47	2.77	26.90	122.7	0.813
1236p	3.44	34.52	0.78	2.87	500	6.36	34.36	0.32	2.89	27.02	111.8	0.931
					600	5.72	34.39	0.32	2.94	27.13	102.7	1.038
					700	5.21	34.41	0.40	2.95	27.20	95.1	1.137
					800	4.80	34.43	0.46	2.95	27.27	90.2	1.229
					1000	4.09	34.47	0.61	2.93	27.38	80.4	1.400

CREST; August 10, 1949; 1927 GCT; 29°21.3'N, 116°43.6'W; sounding, missing; wind, 330°, force 3; weather, cloudy; sea, rough; wire angle, 8°. 1102

0	21.0	33.89	5.18	0.43	0	21.0	33.89	5.18	0.43	23.67	423.9	0.000
10	20.06	33.86	5.06	0.35	10	20.06	33.86	5.06	0.35	23.90	401.5	0.041
25	20.00	33.84	5.04	0.39	20	20.02	33.84	5.05	0.38	23.89	403.2	0.082
49	16.71	33.60	5.65	0.36	30	20.01	33.83	5.07	0.39	23.89	404.0	0.122
73	14.98	33.54	5.56	0.37	50	16.64	33.60	5.65	0.36	24.54	341.7	0.196
96	12.84	33.49	5.66	0.60	75	14.77	33.53	5.57	0.37	24.91	307.5	0.278
143	10.77	33.53	4.20	1.22	100	12.62	33.48	5.64	0.66	25.31	269.6	0.350
190	9.72	34.07	1.94	2.12	150	10.52	33.59	3.27	1.33	25.79	225.2	0.473
283	9.40	34.31	0.97	2.39	200	9.67	34.11	1.77	2.17	26.33	174.1	0.573
377	8.42	34.42	0.49	2.68	250	9.52	34.24	1.18	2.30	26.46	163.1	0.657
568	6.58	34.38	0.34	2.87	300	9.23	34.34	0.85	2.44	26.58	152.2	0.736
861	4.68	34.43	0.48	2.98	400	8.18	34.42	0.45	2.73	26.81	131.6	0.878
1280	3.33	34.52	0.96	2.99	500	7.22	34.40	0.36	2.84	26.94	120.6	1.004
					600	6.32	34.38	0.35	2.89	27.04	111.2	1.120
					700	5.58	34.39	0.39	2.94	27.14	101.8	1.226
					800	4.99	34.41	0.44	2.97	27.23	93.9	1.324
					1000	4.09	34.47	0.61	2.98	27.38	80.3	1.498

CREST; August 10, 1949; 1343 GCT; 29°03'N, 117°20'W; sounding, missing; wind, 330°, force 3; weather, partly cloudy; sea, rough; wire angle, 5°. 1103

0	19.7	33.71	5.44	0.40	0	19.7	33.71	5.44	0.40	23.88	404.0	0.000
10	19.15	33.68	5.40	0.40	10	19.15	33.68	5.40	0.40	24.00	393.0	0.040
24	18.96	33.67	5.42	0.41	20	19.02	33.67	5.42	0.41	24.02	390.8	0.079
48	14.36	33.46	6.16	0.41	30	18.73	33.65	5.48	0.41	24.08	385.5	0.118
71	13.46	33.51	6.13	0.46	50	14.27	33.46	6.16	0.41	24.96	302.0	0.187
95	11.50	33.49	4.96	1.00	75	13.26	33.51	6.07	0.47	25.21	279.0	0.259
142	10.04	33.93	2.63	1.91	100	11.22	33.49	4.69	1.16	25.58	243.8	0.324
190	10.22	34.25	1.37	2.25	150	10.04	34.01	2.15	2.00	26.19	186.5	0.433
287	9.79	34.40	0.71	2.48	200	10.22	34.28	1.25	2.29	26.37	170.7	0.521
384	9.02	34.42	0.51	2.62	250	10.04	34.37	0.90	2.42	26.47	162.3	0.604
580	7.02	34.36	0.28	2.83	300	9.71	34.41	0.69	2.50	26.56	154.8	0.684
875	4.96	34.42	0.32	2.98	400	8.88	34.42	0.49	2.63	26.70	142.0	0.832
1297	3.42	34.52	0.85	2.93	500	7.83	34.38	0.35	2.75	26.83	131.0	0.968
					600	6.84	34.36	0.30	2.85	26.96	119.7	1.094
					700	6.03	34.38	0.30	2.92	27.08	108.8	1.208
					800	5.38	34.40	0.31	2.97	27.18	99.6	1.313
					1000	4.36	34.46	0.45	2.97	27.34	85.4	1.498

a) Middle thermometer reading of 7.30° rejected.

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

1104 CREST; August 10, 1949; 0831 GCT; 28°47.5'N, 117°56.5'W; sounding, missing, wind, 360°, force 3; weather, cloudy; sea, rough; wire angle, 2°[a].

0	21.1	33.86	5.15	0.57	0	21.1	33.86	5.15	0.57	23.62	428.5	0.000
10	20.59	33.82	5.35	0.39	10	20.59	33.82	5.35	0.39	23.73	418.7	0.042
25	20.60	33.86	5.64	0.39	20	20.61	33.85	5.60	0.39	23.75	417.2	0.084
50	16.10	33.57	6.30	0.40	30	20.52	33.85	5.83	0.39	23.77	415.1	0.126
75	13.60	33.44	5.98	0.44	50	16.10	33.57	6.30	0.40	24.66	330.7	0.200
100	11.98	33.49	5.47	0.97	75	13.60	33.44	5.98	0.44	25.09	290.8	0.278
149	9.82	33.87	3.26	1.71	100	11.98	33.49	5.47	0.97	25.44	257.2	0.346
198	9.04	34.13	2.58	2.16	150	9.81	33.87	3.25	1.71	26.12	193.2	0.459
296	8.42	34.31	1.12	2.55	200	9.02	34.14	2.56	2.16	26.46	161.7	0.548
394	6.50	34.22	1.06	2.74	250	8.69	34.28	1.69	2.41	26.62	147.1	0.625
588	5.57	34.36	0.35	3.09	300	8.38	34.31	1.11	2.56	26.70	141.1	0.697
1221	3.63[b]	34.55	0.96	3.00	400	6.48	34.22	1.02	2.76	26.90	122.2	0.828
					500	5.95	34.29	0.50	3.03	27.02	111.5	0.945
					600	5.52	34.36	0.35	3.09	27.13	102.2	1.053
					700	5.15	34.41	0.38	3.08	27.21	94.8	1.150
					800	4.81	34.45	0.45	3.07	27.28	88.8	1.243
					1000	4.20	34.51	0.65	3.05	27.40	78.8	1.410

1105 CREST; August 9, 1949; 2216 GCT; 28°27'N, 118°36'W; sounding, missing; wind 340°, force 4; weather, cloudy; sea, rough; wire angle, 20°.

0	21.5	33.91	5.25	0.41	0	21.5	33.91	5.25	0.41	23.55	435.0	0.000
10	20.87	33.93	5.28	0.38	10	20.87	33.93	5.28	0.38	23.74	417.6	0.043
23	20.74	33.89	5.21	0.41	20	20.77	33.90	5.24	0.40	23.74	417.6	0.084
46	17.24	33.66	6.04	0.38	30	20.66	33.85	5.37	0.40	23.73	418.7	0.126
68	13.48	33.39	6.14	0.46	50	15.12	33.64	6.07	0.40	24.92	306.2	0.199
90	15.99[c]	33.46	6.10	0.45	75	13.29	33.39	6.15	0.45	25.11	288.3	0.273
131	11.77	33.66	3.68	1.45	100	12.64	33.48	5.91	0.48	25.31	269.9	0.343
172	9.94	33.93	2.60	1.89	150	10.43	33.85	2.89	1.70	26.00	204.7	0.461
248	9.03	34.09	1.84	2.20	200	9.52	34.00	2.34	2.01	26.27	179.8	0.558
327	8.30	34.29	0.83	2.57	250	9.01	34.10	1.78	2.20	26.43	165.8	0.644
492	6.86	34.42	0.27	2.83	300	8.56	34.22	1.11	2.44	26.60	150.6	0.723
745	5.02	34.45	0.29	2.98	400	7.66	34.38	0.42	2.73	26.86	126.8	0.861
1148	3.52	34.52	0.84	2.93	500	6.78	34.42	0.28	2.84	27.01	112.9	0.981
					600	5.96	34.43	0.27	2.90	27.13	102.5	1.089
					700	5.28	34.44	0.29	2.97	27.22	94.2	1.187
					800	4.73	34.46	0.31	2.98	27.30	87.0	1.278
					1000	3.92	34.49	0.56	2.95	27.41	77.0	1.443

1106 CREST; August 9, 1949; 1641 GCT; 28°01'N, 119°15'W; sounding, missing; wind, 330°, force 4; weather, cloudy; sea, very rough; wire angle, 5°.

0	20.0	33.84	5.34	0.43	0	20.0	33.84	5.34	0.43	23.90	402.0	0.000
10	19.55	33.82	5.33	0.42	10	19.55	33.82	5.33	0.42	24.00	392.7	0.040
25	19.54	33.80	5.36	0.40	20	19.53	33.81	5.34	0.41	24.00	393.5	0.079
50	17.23	33.75	5.94	0.37	30	19.50	33.79	5.45	0.39	23.99	394.1	0.118
74	15.52	33.62	5.94	0.40	50	17.23	33.75	5.94	0.37	24.52	343.8	0.192
98	14.70	33.66	5.84	0.42	75	15.51	33.62	5.94	0.40	24.81	316.8	0.275
146	12.10	33.40	5.15	0.86	100	14.62	33.66	5.82	0.42	25.04	295.5	0.351
194	10.03	33.77	3.50	1.65	150	11.90	33.40	5.00	0.96	25.39	263.4	0.491
287	8.09	34.00	2.66	2.08	200	9.92	33.80	3.41	1.68	26.05	201.1	0.607
381	6.82	34.09	1.48	2.50	250	8.78	33.95	2.92	1.91	26.35	172.7	0.701
573	5.93	34.27	0.37	2.87	300	7.87	34.01	2.57	2.14	26.54	155.7	0.785
863	4.48	34.36	0.49	3.01	400	6.70	34.12	1.17	2.56	26.79	132.7	0.930
1285	3.32	34.51	0.92	2.97	500	6.25	34.23	0.51	2.79	26.93	119.9	1.056
					600	5.77	34.28	0.39	2.89	27.04	111.4	1.172
					700	5.23	34.31	0.40	2.95	27.13	103.2	1.279
					800	4.76	34.34	0.45	3.00	27.20	96.2	1.379
					1000	4.02	34.41	0.61	3.00	27.34	84.2	1.559

a) Wire probably against ship.
b) Middle thermometer reading of 3.50° rejected.
c) This and left thermometer reading of 15.39° rejected.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

CREST; August 9, 1949; 1050 GCT; 27°36'N, 119°52'W; sounding, missing; wind, 350°, force 3; weather, cloudy; sea, very rough; wire angle, 8°. 1107

0	21.0	33.84	5.07	0.40	0	21.0	33.84	5.07	0.40	23.63	427.5	0.000
10	20.22	33.82	5.27	0.38	10	20.22	33.82	5.27	0.38	23.82	409.4	0.042
24	20.21	33.80	4.99	0.38	20	20.21	33.81	5.05	0.38	23.82	409.7	0.083
48	16.99	33.64	5.66	0.34	30	20.17	33.77	5.13	0.37	23.80	412.1	0.124
70	15.26	33.62	5.37	0.39	50	16.82	33.63	5.64	0.34	24.53	343.6	0.199
93	14.58	33.64	5.38	0.41	75	15.13	33.62	5.38	0.39	24.90	308.5	0.281
137	12.36	33.49	4.55	0.90	100	14.32	33.63	5.28	0.43	25.08	291.8	0.356
182	10.13	33.73	3.67	1.49	150	11.36	33.54	4.30	1.09	25.60	243.7	0.490
273	8.67	34.09	2.12	2.16	200	9.70	33.82	3.35	1.68	26.10	196.2	0.600
365	7.84	34.27	1.03	2.63	250	8.92	34.02	2.49	2.03	26.38	169.9	0.692
550	6.23	34.33	0.29	2.92	300	8.41	34.15	1.75	2.31	26.57	153.4	0.772
835	4.77	34.51	0.42	2.98	400	7.52	34.29	1.77	2.72	26.81	131.6	0.915
1252	3.50	34.54	0.87	2.98	500	6.67	34.31	0.35	2.88	26.94	119.5	1.040
					600	5.93	34.36	0.30	2.95	27.08	107.5	1.154
					700	5.38	34.43	0.34	2.97	27.20	96.1	1.256
					800	4.93	34.49	0.40	2.98	27.30	87.2	1.347
					1000	4.20	34.53	0.58	2.98	27.41	77.2	1.511

CREST; August 9, 1949; 0445 GCT; 27°07'N, 120°29'W; sounding, missing; wind, 360°, force 4; weather, cloudy; sea, very rough; wire angle, 2°. 1108

0	22.0	34.33	5.40	0.42	0	22.0	34.33	5.40	0.42	23.73	417.9	0.000
10	21.01	33.98	5.21	0.37	10	21.01	33.98	5.21	0.37	23.74	417.7	0.042
25	20.99	34.00	5.23	0.35	20	21.00	33.99	5.24	0.36	23.75	417.1	0.084
49	17.59	33.75	5.92	0.38	30	20.93	33.90	5.38	0.36	23.70	422.2	1.125
74	15.39	33.66	5.99	0.44	50	17.59	33.75	5.95	0.38	24.44	352.1	0.203
98	14.23	33.62	5.72	0.50	75	15.38	33.66	5.96	0.44	24.88	310.9	0.286
148	11.46	33.55	4.45	1.09	100	14.12	33.61	5.66	0.50	25.11	289.2	0.361
196	9.74	33.84	3.40	1.63	150	11.38	33.55	4.40	1.11	25.60	243.0	0.494
294	8.28	34.16	1.88	2.26	200	9.63	33.88	3.30	1.67	26.16	190.5	0.603
392	7.25	34.27	0.94	2.63	250	8.82	34.09	2.41	2.04	26.46	163.2	0.691
592	5.70	34.36	0.36	2.89	300	8.23	34.17	1.79	2.28	26.61	149.3	0.769
890	4.48	34.42	0.53	2.93	400	7.19	34.28	0.88	2.66	26.85	127.6	0.907
1314	3.29	34.52	0.93	2.90	500	6.36	34.34	0.46	2.84	27.01	113.1	1.028
					600	5.67	34.36	0.37	2.89	27.11	103.9	1.136
					700	5.19	34.38	0.40	2.91	27.19	97.3	1.237
					800	4.79	34.40	0.46	2.92	27.25	92.0	1.331
					1000	4.12	34.45	0.64	2.92	27.36	82.3	1.506

CREST; August 8, 1949; 2241 GCT; 26°46'N, 121°07'W; sounding, missing; wind, 010°, force 4; weather, cloudy; sea, very rough; wire angle, 15°. 1109

0	22.0	34.05	5.22	0.36	0	22.0	34.05	5.22	0.36	23.52	438.2	0.000
10	21.14	34.02	5.19	0.37	10	21.14	34.02	5.19	0.37	23.73	418.5	0.043
24	20.95	34.00	5.20	0.36	20	21.05	34.01	5.20	0.36	23.75	416.9	0.085
46	19.58	33.89	5.54	0.38	30	20.73	33.99	5.26	0.36	23.82	410.5	0.126
68	16.38	33.71	5.86	0.43	50	18.91	33.85	5.60	0.39	24.19	376.0	0.205
90	14.52	33.62	5.80	0.44	75	15.82	33.67	5.86	0.43	24.79	319.4	0.291
132	11.72	33.55	4.31	1.21	100	13.76	33.59	5.50	0.46	25.17	283.6	0.367
174	9.94	33.77	3.42	1.74	150	10.69	33.57	3.90	1.50	25.74	229.7	0.495
258	8.68	34.11	2.11	2.22	200	9.52	34.02	2.95	1.94	26.29	178.3	0.598
343	7.36	34.16	1.25	2.51	250	8.78	34.10	2.22	2.19	26.47	161.8	0.682
518	6.20	34.27	0.41	2.92	300	7.98	34.14	1.67	2.37	26.63	147.5	0.759
792	4.72	34.51[a]	0.46	3.04[b]	400	6.92	34.18	0.76	2.68	26.80	131.3	0.899
1203	3.48	34.47	0.89	3.14[c]	500	6.32	34.25	0.44	2.90	26.94	119.2	1.024
					600	5.72	34.35	0.43	2.99	27.10	105.5	1.136
					700	5.17	34.41	0.45	3.02	27.21	95.0	1.237
					800	4.70	34.43	0.47	3.04	27.28	88.8	1.328
					1000	4.00	34.46	0.63	3.09	27.38	80.0	1.497

a) Value rejected; it appears possible that sample bottle number was interchanged with that of next sample.
b) Value of 3.32 rejected.
c) Value of 2.99 rejected.

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4908

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
1110	CREST; August 8, 1949; 1723 GCT; 26°14'N, 121°45'W; sounding, missing; wind, 010°, force 4; weather, cloudy; sea, very rough; wire angle, 14°.											
0	21.7	34.25	5.12	0.40	0	21.7	34.25	5.12	0.40	23.75	415.8	0.000
10	21.04	34.23	5.07	0.37	10	21.04	34.23	5.07	0.37	23.92	400.6	0.041
23	21.03	34.22	5.16	0.32	20	21.05	34.22	5.14	0.33	23.91	401.8	0.081
47	18.82	34.13	5.14	0.30	30	21.00	34.20	5.16	0.31	23.91	402.3	0.121
70	17.90	34.11	5.81	0.35	50	18.73	34.13	5.16	0.30	24.45	351.4	0.197
93	16.18	33.95	5.45	0.37	75	17.42	34.09	5.78	0.35	24.74	324.3	0.281
138	15.08	33.91	5.38	0.46	100	16.03	33.93	5.45	0.38	24.94	305.6	0.360
183	10.80	33.64	4.34	1.40	150	13.47	33.81	5.15	0.51	25.40	262.8	0.502
275	8.73	34.07	2.82	2.04	200	10.27	33.66	4.05	1.62	25.88	217.2	0.621
367	7.68	34.25	1.27	2.51	250	9.12	33.89	3.21	1.93	26.25	182.6	0.722
552	5.95	34.31	0.59	2.98	300	8.42	34.15	2.37	2.17	26.56	153.6	0.806
834	4.70	34.47	0.50	3.11	400	7.33	34.27	0.94	2.65	26.82	130.5	0.948
1247	3.36	34.56	0.93	3.05	500	6.88	34.30	0.64	2.91	26.91	123.2	1.075
					600	5.70	34.33	0.56	3.02	27.08	106.6	1.190
					700	5.24	34.40	0.52	3.08	27.19	96.7	1.290
					800	4.83	34.46	0.50	3.11	27.29	88.1	1.384
					1000	4.12	34.52	0.62	3.10	27.41	77.1	1.549
1111	CREST; August 8, 1949; 1135 GCT; 25°52'N, 122°24'W; sounding, missing; wind, 020°, force 4; weather, cloudy; sea, rough; wire angle, 13°.											
0	21.4	34.18	5.19	0.43	0	21.4	34.18	5.19	0.43	23.78	413.2	0.000
10	20.97	34.05	5.19	0.44	10	20.97	34.05	5.19	0.44	23.80	411.8	0.041
24	20.98	34.11	5.13	0.44	20	20.98	34.11	5.15	0.45	23.84	407.9	0.082
47	18.81	34.11	5.66	0.42	30	20.78	34.12	5.18	0.44	23.90	402.5	0.123
70	17.48	34.09	5.65	0.42	50	18.56	34.11	5.66	0.42	24.47	348.8	0.198
93	16.70	33.93	5.62	0.45	75	17.26	34.07	5.65	0.43	24.76	322.1	0.282
138	14.32	33.75	5.07	0.65	100	16.46	33.92	5.58	0.46	24.83	315.8	0.362
183	11.00	33.66	4.15	1.40	150	13.24	33.70	4.80	0.85	25.36	266.6	0.507
274	8.76	34.00	2.76	2.07	200	10.31	33.67	3.82	1.57	25.88	217.2	0.628
366	7.76	34.25	1.49	2.52	250	9.08	33.80	3.05	1.93	26.19	188.7	0.705
550	6.04	34.34	0.51	3.03	300	8.46	34.16	2.40	2.21	26.57	153.3	0.790
830	4.64	34.45	0.44	3.10	400	7.38	34.27	1.16	2.66	26.81	131.8	0.936
1233	3.40	34.53	0.95	3.19	500	6.46	34.32	0.58	2.96	26.98	116.0	1.060
					600	5.73	34.36	0.49	3.05	27.10	104.9	1.170
					700	5.18	34.40	0.46	3.07	27.20	95.8	1.271
					800	4.72	34.44	0.45	3.09	27.28	88.4	1.363
					1000	4.00	34.49	0.58	3.14	27.40	78.0	1.529
1201	CREST; August 5, 1949; 1252 GCT; 27°30'N, 115°18'W; sounding, missing; wind, 290°, force 4; weather, overcast; sea, rough; wire angle, 17°.											
0	21.0	33.77	5.16	0.55	0	21.0	33.77	5.16	0.55	23.58	432.4	0.000
9	20.73	33.86	5.12	0.41	10	20.70	33.86	5.13	0.41	23.73	418.4	0.043
23	18.14	33.71	5.70	0.41	20	18.85	33.81	5.61	0.41	24.17	376.8	0.082
46	13.12	33.41	5.77	0.62	30	16.85	33.54	5.76	0.44	24.45	350.3	0.119
68	11.50	33.58	4.34	1.21	50	12.80	33.42	5.73	0.70	25.23	276.2	0.181
90	10.60	33.75	3.22	1.72	75	11.00	33.63	4.00	1.42	25.73	229.2	0.244
135	10.53	34.18	1.73	2.07	100	10.58	33.89	2.77	1.80	26.01	203.3	0.299
178	10.24	34.33	1.27	2.64	150	10.43	34.25	1.55	2.32	26.31	175.2	0.393
262	9.80	34.51	0.54	3.32r	200	10.13	34.41	1.00	2.73	26.49	159.7	0.477
344	9.08	34.51	0.35	3.05	250	9.86	34.51	0.62	2.89	26.62	148.6	0.554
512	6.64[a]	34.33	0.41	3.16	300	9.52	34.51	0.40	2.99	26.67	144.1	0.627
771	5.13	34.43	0.35	3.62r	400	8.15	34.44	0.34	3.10	26.83	129.8	0.764
1140	3.70	34.51	0.53	3.32	500	6.77	34.33	0.39	3.16	26.95	119.3	0.889
					600	6.06	34.37	0.40	3.22	27.07	108.5	1.002
					700	5.50	34.41	0.37	3.26	27.17	99.3	1.106
					800	5.00	34.44	0.36	3.29	27.25	91.7	1.201
					1000	4.18	34.49	0.45	3.32	27.38	79.9	1.373

a) Middle thermometer reading of 5.52° rejected.

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

CREST; August 5, 1949; 2152 GCT; 27°05'N, 115°53'W; sounding, missing; wind, 310°, force 3; weather, overcast; sea, moderate; wire angle, 10°. 1202

0	20.1	33.69	5.43	0.40	0	20.1	33.69	5.43	0.40	23.76	415.3	0.000
10	18.95	33.68	5.52	0.38	10	18.95	33.68	5.52	0.38	24.05	388.3	0.040
24	18.06	33.55	5.67	0.41	20	18.44	33.64	5.63	0.40	24.14	379.3	0.079
47	14.59	33.44	6.25	0.48	30	17.43	33.50	5.82	0.43	24.28	366.2	0.116
70	11.60	33.46	4.87	1.08	50	14.14	33.44	6.25	0.50	24.97	300.9	0.182
92	10.80	33.77	3.21	1.71	75	11.39	33.50	3.90	1.25	25.56	245.4	0.251
138	9.74	34.04	2.50	2.04	100	10.48	33.82	3.05	1.78	25.97	206.5	0.307
183	10.55	34.47	0.78	2.60	150	9.87	34.20	2.00	2.12	26.37	169.4	0.401
276	9.54	34.47	0.41	2.80	200	10.49	34.47	0.63	2.68	26.48	161.0	0.484
369	8.18	34.40	0.50	2.84	250	9.92	34.47	0.44	2.78	26.57	152.5	0.563
556	6.70	34.43	0.33	3.07	300	9.17	34.45	0.45	2.81	26.68	142.9	0.636
840	4.74	34.43	0.50	3.17	400	7.88	34.40	0.45	2.86	26.84	128.7	0.772
1136	3.72	34.52	0.66	3.13	500	7.13	34.42	0.34	2.99	26.96	117.7	0.895
					600	6.32	34.43	0.36	3.09	27.08	107.6	1.008
					700	5.58	34.43	0.44	3.13	27.18	98.9	1.111
					800	4.97	34.43	0.49	3.16	27.25	92.2	1.207
					1000	4.06	34.48	0.60	3.15	27.39	79.3	1.378

CREST; August 6, 1949; 0341 GCT; 26°41'N, 116°28'W; sounding, missing; wind, 310°, force 2; weather, overcast; sea, moderate; wire angle, 15°. 1203

0	21.0	33.71	5.15	0.42	0	21.0	33.71	5.15	0.42	23.53	436.7	0.000
10	20.14	33.71	5.34	0.40	10	20.14	33.71	5.34	0.40	23.76	415.4	0.043
23	19.64	33.66	5.36	0.39	20	19.87	33.69	5.35	0.39	23.87	410.0	0.084
46	14.80	33.42	6.00	0.39	30	17.60	33.54	5.45	0.39	24.27	367.3	0.123
69	13.54	33.44	5.86	0.44	50	14.44	33.42	5.99	0.40	24.89	308.3	0.190
91	12.07	33.39	5.43	0.77	75	13.27	33.43	5.82	0.46	25.14	285.1	0.264
137	9.70	33.73	3.66	1.61	100	11.10	33.40	5.12	0.92	25.53	248.5	0.331
182	10.13	34.23	1.57	2.34	150	9.76	33.91	2.96	1.83	26.16	189.2	0.441
275	9.68	34.51	0.44	2.70	200	10.12	34.34	1.10	2.48	26.44	164.6	0.529
367	8.44	34.45	0.50	2.90	250	9.90	34.47	0.50	2.64	26.58	152.2	0.608
557	6.68	34.43	0.21	3.10	300	9.33	34.51	0.45	2.76	26.70	141.2	0.682
844	4.74	34.43	0.35	3.18	400	8.13	34.44	0.43	2.95	26.83	129.6	0.816
1133	3.78	34.54	0.73	3.20	500	7.21	34.43	0.24	3.06	26.96	118.3	0.941
					600	6.32	34.43	0.21	3.12	27.08	107.6	1.054
					700	5.57	34.43	0.24	3.16	27.18	98.7	1.156
					800	4.96	34.43	0.31	3.18	27.25	92.0	1.253
					1000	4.13	34.49	0.55	3.19	27.39	79.5	1.424

CREST; August 6, 1949; 0940 GCT; 26°15.5'N, 117°03'W; sounding, missing; wind, 330°, force 2; weather, overcast; sea, moderate; wire angle, 8°. 1204

0	21.1	33.77	5.23	0.45	0	21.1	33.77	5.23	0.45	23.55	435.1	0.000
10	20.64	33.73	5.25	0.43	10	20.64	33.73	5.25	0.43	23.64	426.6	0.043
25	19.50	33.64	5.35	0.42	20	19.96	33.68	5.32	0.42	23.79	413.1	0.085
49	16.18	33.57	5.90	0.36	30	18.93	33.62	5.45	0.41	24.01	392.5	0.125
73	14.48	33.46	5.86	0.41	50	16.19	33.56	5.90	0.36	24.62	334.8	0.198
96	12.92	33.39	5.92	0.56	75	14.25	33.46	5.86	0.42	24.97	302.2	0.278
142	10.96	33.57	4.30	1.48	100	12.68	33.39	5.90	0.60	25.23	278.3	0.350
189	10.04	34.09	2.16	2.20	150	10.72	33.95	3.89	1.62	26.03	202.2	0.470
282	9.06	34.09	0.91	2.57	200	9.94	34.09	1.91	2.26	26.27	180.0	0.566
378	7.90	34.38	0.45	2.90	250	9.42	34.09	1.18	2.47	26.36	172.5	0.654
569	6.06	34.42	0.30	3.11	300	8.82	34.11	0.77	2.64	26.47	162.6	0.737
857	4.59	34.47	0.44	3.22	400	7.66	34.39	0.41	2.93	26.87	126.2	0.882
1280	3.36	34.56	0.91	3.17	500	6.67	34.42	0.31	3.06	27.03	111.4	1.001
					600	5.88	34.42	0.30	3.13	27.13	102.3	1.108
					700	5.33	34.44	0.30	3.17	27.21	94.7	1.206
					800	4.88	34.45	0.36	3.21	27.27	89.4	1.298
					1000	4.13	34.50	0.57	3.21	27.40	78.7	1.466

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

1205 CREST; August 6, 1949; 1537 GCT; 25°51'N, 117°37'W; sounding, missing; wind, 330°, force 2; weather, overcast; sea, rough; wire angle, 8°.

0	21.7	33.77	5.27	0.44	0	21.7	33.77	5.27	0.44	23.39	450.6	0.000
10	21.07	33.77	5.27	0.47	10	21.07	33.77	5.27	0.47	23.56	434.5	0.044
24	20.91	33.73	5.36	0.43	20	20.96	33.75	5.35	0.44	23.58	433.5	0.088
49	16.63	33.64	6.01	0.44	30	20.34	33.70	5.47	0.43	23.70	421.7	0.130
73	14.74	33.57	5.95	0.43	50	16.50	33.64	6.02	0.44	24.61	335.7	0.206
97	13.60	33.53	5.80	0.53	75	14.64	33.56	5.75	0.43	24.96	302.7	0.286
146	10.83	33.62	3.88	1.49	100	13.29	33.53	5.80	0.56	25.22	278.7	0.359
194	9.89	34.05	2.57	2.09	150	10.73	33.68	3.75	1.56	25.82	222.3	0.484
289	8.82	34.29	1.16	2.58	200	9.81	34.08	2.50	2.16	26.29	178.7	0.585
383	7.99	34.36	0.53	2.83	250	9.22	34.22	1.66	2.44	26.49	159.9	0.669
572	6.33	34.42	0.22	3.09	300	8.75	34.30	1.07	2.62	26.63	147.6	0.745
859	4.74	34.48	0.38	3.21	400	7.81	34.37	0.48	2.86	26.83	129.9	0.884
1282	3.40	34.56	0.90	3.13	500	6.96	34.40	0.27	3.02	26.97	116.7	1.008
					600	6.15	34.42	0.24	3.12	27.10	105.9	1.119
					700	5.52	34.44	0.28	3.18	27.20	97.2	1.220
					800	5.01	34.47	0.35	3.21	27.27	89.7	1.314
					1000	4.23	34.52	0.55	3.21	27.40	78.4	1.482

1206 CREST; August 6, 1949; 2026 GCT; 25°26'N, 118°12'W; sounding, missing; wind, 360°, force 2; weather, overcast; sea, very rough; wire angle, 6°.

0	23.3	34.43	5.16	0.47	0	23.3	34.43	5.16	0.47	23.44	446.1	0.000
10	22.66	34.43	5.18	0.45	10	22.66	34.43	5.18	0.45	23.62	428.6	0.044
24	22.59	34.42	4.81	0.43	20	22.61	34.42	4.90	0.44	23.63	428.7	0.087
48	19.06	34.02	5.67	0.41	30	22.49	34.20	4.88	0.42	23.49	441.7	0.130
73	16.78	33.96	5.10	0.61	50	18.92	34.01	5.65	0.41	24.31	364.5	0.211
98	14.41	33.78	4.23	1.11	75	16.73	33.95	5.03	0.62	24.79	318.9	0.296
147	11.00	33.80	3.10	1.83	100	14.14	33.77	4.15	1.13	25.23	277.8	0.371
196	10.02	34.09	2.28	2.26	150	10.89	33.89	3.03	1.86	25.95	209.4	0.492
295	9.34	34.43	0.70	2.77	200	9.99	34.10	2.20	2.28	26.27	180.1	0.590
394	8.29	34.45	0.39	2.98	250	9.62	34.32	1.23	2.58	26.50	158.9	0.675
591	6.17	34.40	0.26	3.18	300	9.31	34.43	0.66	2.78	26.64	146.8	0.751
887	4.52	34.47	0.44	3.29	400	8.23	34.45	0.37	2.99	26.83	130.3	0.889
1306	3.29	34.58	0.96	3.29	500	7.07	34.42	0.27	3.10	26.97	117.0	1.013
					600	6.09	34.40	0.26	3.19	27.09	106.6	1.125
					700	5.46	34.42	0.29	3.25	27.18	98.0	1.227
					800	4.93	34.44	0.35	3.28	27.26	91.3	1.322
					1000	4.12	34.51	0.54	3.29	27.41	77.8	1.491

1207 CREST; August 7, 1949; 0159 GCT; 25°02'N, 118°46'W; sounding, missing; wind, 010°, force 2; weather, overcast; sea, rough; wire angle, 18°.

0	22.3	34.25	5.12	0.45	0	22.3	34.25	5.12	0.45	23.59	431.7	0.000
10	21.81	34.23	5.10	0.46	10	21.81	34.23	5.10	0.46	23.71	420.4	0.043
23	21.75	34.23	5.12	0.45	20	21.75	34.23	5.13	0.45	23.72	419.3	0.085
45	18.76	33.93	5.61	0.41	30	21.03	34.10	5.27	0.44	23.82	410.3	0.126
66	16.19	33.87	5.81	0.46	50	17.67	33.91	5.68	0.42	24.54	342.2	0.201
88	15.01	33.71	5.72	0.49	75	15.64	33.82	5.80	0.47	24.94	304.6	0.282
130	12.69	33.64	5.05	0.87	100	14.36	33.67	5.60	0.52	25.10	289.6	0.356
173	10.79	33.95	2.80	1.92	150	11.57	33.68	4.50	1.46	25.67	236.8	0.488
256	9.61	34.40	1.14	2.54	200	10.32	34.25	1.98	2.20	26.33	174.4	0.591
341	8.70	34.47	0.48	2.81	250	9.67	34.39	1.22	2.52	26.55	154.4	0.673
513	6.92	34.45	0.29	3.08	300	9.12	34.45	0.73	2.71	26.69	142.3	0.747
782	5.12	34.49	0.36	3.21	400	8.07	34.46	0.32	2.94	26.86	127.2	0.882
1188	3.70	34.54	0.72	3.21	500	7.06	34.45	0.29	3.07	27.00	114.7	1.003
					600	6.23	34.46	0.29	3.14	27.12	104.0	1.112
					700	5.55	34.47	0.30	3.20	27.21	95.4	1.212
					800	5.02	34.49	0.36	3.21	27.29	88.6	1.303
					1000	4.21	34.53	0.54	3.21	27.41	77.3	1.469

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

CREST; August 7, 1949; 0746 GCT; 24°36'N, 119°21'W; sounding, missing; wind, 360°, force 2; weather, overcast; sea, rough; wire angle, 2°. 1208

0	24.1	34.63	4.95	0.38	0	24.1	34.63	4.95	0.38	23.35	454.1	0.000	
10	23.42	34.52	4.88	0.38	10	23.42	34.52	4.88	0.38	23.47	443.1	0.045	
25	23.42	34.56	4.90	0.37	20	23.42	34.55	4.90	0.37	23.49	441.5	0.089	
50	18.10	34.02	5.39	0.45	30	23.15	34.45	4.99	0.38	23.50	441.6	0.133	
74	15.98	33.82	5.74	0.37	50	18.10	34.02	5.39	0.45	24.52	344.5	0.212	
99	14.82	33.69	5.66	0.46	75	15.90	33.82	5.74	0.37	24.88	310.2	0.294	
148	11.39	33.59	4.30	1.29	100	14.78	33.69	5.64	0.46	25.03	296.6	0.369	
197	9.88	34.02	2.94	1.96	150	11.29	33.59	4.23	1.30	25.65	238.6	0.503	
296	9.22	34.36	1.25	2.56	200	9.85	34.05	2.88	1.99	26.26	181.4	0.608	
396	8.14	34.42	0.52	2.91	250	9.49	34.27	1.93	2.32	26.49	160.3	0.694	
595	6.18	34.43	0.27	3.24	300	9.18	34.37	1.21	2.58	26.62	149.2	0.771	
893	4.64	34.50	0.45	3.24	400	8.10	34.42	0.53	2.92	26.82	130.5	0.911	
1316	3.30	34.60	0.93	3.22	500	7.05	34.42	0.32	3.14	26.98	116.7	1.035	
					600	6.15	34.43	0.28	3.24	27.11	105.2	1.146	
					700	5.54	34.45	0.31	3.24	27.20	96.7	1.246	
					800	5.05	34.48	0.38	3.24	27.28	89.4	1.339	
					1000	4.24	34.53	0.56	3.24	27.41	77.8	1.507	

CREST; August 7, 1949; 1329 GCT; 24°07'N, 120°03'W; sounding, missing; wind, 360°, force 3; weather, cloudy; sea, rough; wire angle, 2°. 1209

0	23.9	34.44	5.18	0.41	0	23.9	34.44	5.18	0.41	23.27	462.1	0.000	
10	22.94	34.38	5.13	0.42	10	22.94	34.38	5.13	0.42	23.50	440.0	0.045	
25	22.93	34.40	5.17	0.39	20	22.94	34.39	5.16	0.40	23.51	439.8	0.089	
50	18.71	34.05	5.50	0.40	30	22.90	34.40	5.25	0.39	23.53	438.4	0.133	
74	16.00	33.80	5.66	0.38	50	18.71	34.05	5.50	0.40	24.40	355.2	0.212	
98	14.96	33.69	5.73	0.53	75	15.99	33.81	5.68	0.38	24.85	312.9	0.296	
148	11.38	33.57	4.54	1.16	100	14.85	33.68	5.72	0.53	25.01	298.9	0.372	
196	9.94	34.02	2.76	1.88	150	11.31	33.57	4.48	1.18	25.63	240.4	0.507	
294	8.72	34.33	1.21	2.50	200	9.88	34.06	2.66	1.92	26.26	181.2	0.612	
391	7.64	34.36	0.71	2.87	250	9.23	34.28	1.70	2.26	26.54	155.6	0.697	
585	5.96	34.43	0.16	3.07	300	8.65	34.33	1.15	2.53	26.67	143.8	0.771	
878	4.61	34.49	0.53	3.14	400	7.55	34.37	0.65	2.88	26.87	126.1	0.906	
1291	3.36	34.56	0.95	3.11	500	6.58	34.40	0.30	3.01	27.02	111.7	1.025	
					600	5.88	34.43	0.18	3.08	27.14	101.6	1.132	
					700	5.36	34.45	0.25	3.12	27.22	94.3	1.230	
					800	4.91	34.48	0.42	3.14	27.30	87.7	1.321	
					1000	4.18	34.51	0.70	3.14	27.40	78.4	1.487	

CREST; August 7, 1949; 1810 GCT; 23°48'N, 120°30'W; sounding, missing; wind, 330°, force 4; weather, partly cloudy; sea, rough; wire angle, 2°. 1210

0	23.0	34.20	5.09	0.36	0	23.0	34.20	5.09	0.36	23.35	454.3	0.000	
10	22.29	34.14	4.88	0.36	10	22.29	34.14	4.88	0.36	23.51	439.7	0.045	
25	20.90	34.00	5.15	0.31	20	22.19	34.04	5.04	0.33	23.46	444.7	0.089	
50	18.07	33.95	5.73	0.33	30	20.10	33.99	5.27	0.32	23.99	394.7	0.131	
74	16.58	33.95	5.69	0.34	50	18.07	33.95	5.73	0.33	24.47	348.7	0.205	
99	15.56	33.80	5.55	0.42	75	16.55	33.95	5.68	0.34	24.84	314.8	0.288	
148	12.82	33.64	4.74	0.88	100	15.52	33.80	5.51	0.42	24.96	304.0	0.365	
197	10.10	33.91	3.28	1.72	150	12.66	33.64	4.70	0.90	25.43	259.7	0.506	
294	8.35	34.23	1.63	2.44	200	10.00	33.92	3.17	1.76	26.13	193.6	0.619	
391	7.46	34.34	0.79	2.70	250	9.00	34.12	2.06	2.19	26.45	163.7	0.709	
586	6.20	34.43	0.26	3.03	300	8.27	34.24	1.58	2.45	26.66	144.7	0.786	
880	4.58	34.52r	0.50	3.09	400	7.41	34.35	0.71	2.72	26.87	125.5	0.921	
1301	3.30	34.52	0.96	3.21	500	6.79	34.40	0.33	2.92	27.00	114.2	1.041	
					600	6.10	34.43	0.26	3.04	27.11	104.5	1.150	
					700	5.48	34.47	0.33	3.05	27.22	94.6	1.250	
					800	4.94	34.49	0.41	3.06	27.30	87.4	1.341	
					1000	4.13	34.51	0.62	3.12	27.40	78.0	1.506	

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4909

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

201 BLACK DOUGLAS; September 12, 1949; 0333 GCT; 44°24'N, 125°10'W; sounding, 850 fm; wind, missing, force 4; weather, cloudy; sea, rough; wire angle, 12°.

0	16.50	31.78E	6.14	0.28	0	16.50	31.78	6.13	0.28	23.18	469.9	0.000
10	15.92	31.85	6.32	0.35	10	15.92	31.85	6.32	0.35	23.37	452.5	0.046
25	9.17	32.57	5.68	1.39	20	10.35	32.32	6.03	0.46	24.82	314.0	0.084
49	7.86	32.94	5.60	1.46	30	8.45	32.73	5.65	1.40	25.45	254.8	0.113
72	8.09	33.46	3.70	2.09	50	7.86	32.94	5.59	1.49	25.70	231.1	0.162
96	-	33.73	2.96	2.36	75	8.07	33.59	3.62	2.12	26.18	186.2	0.214
141	7.63	33.82	2.04	2.59	100	7.88	33.74	2.82	2.39	26.32	172.8	0.259
185	-	33.89	1.75	2.68	150	7.58	33.84	1.94	2.61	26.45	161.9	0.342
270	6.68	33.95	1.86	2.61	200	7.26	33.90	1.75	2.68	26.54	153.6	0.421
351	6.03	34.02	1.35	2.80	250	6.86	33.94	1.85	2.62	26.62	146.1	0.496
520	5.20	34.18	0.71	3.06	300	6.41	33.97	1.71	2.67	26.71	138.4	0.567
781	-	34.33	0.48	3.15	400	5.78	34.07	1.10	2.90	26.87	124.4	0.698
1102	3.40	34.42	0.52	3.14	500	5.29	34.16	0.75	3.04	27.00	112.9	0.817
					600	4.87	34.24	0.60	3.11	27.11	102.9	0.925
					700	4.50	34.30	0.51	3.14	27.20	94.9	1.023
					800	4.17	34.34	0.48	3.15	27.27	89.1	1.116
					1000	3.63	34.40	0.49	3.14	27.37	80.2	1.286

202 BLACK DOUGLAS; September 12, 1949; 0915 GCT; 44°20'N, 125°50'W; sounding, 2000 fm; wind, 350°, force 4; weather, partly cloudy; sea, very rough; wire angle, 17°.

0	17.10	31.76E	5.88	0.34	0	17.10	31.76	5.89	0.34	23.04	484.7	0.000
10	17.13	31.78	-	0.35	10	17.13	31.78	6.02	0.35	23.05	483.9	0.048
24	11.14	32.39	6.30	0.92	20	12.00	32.21	6.30	0.72	24.45	350.0	0.090
48	8.04	32.75	5.47	1.50	30	10.10	32.55	6.23	1.11	25.04	293.2	0.122
72	7.99	33.19	4.53	1.91	50	8.03	32.76	5.40	1.53	25.53	247.0	0.176
96	7.93	33.57	3.27	2.23	75	8.01	33.25	4.15	1.96	25.92	210.6	0.234
144	7.34	33.78	3.31	2.20	100	7.89	33.60	3.27	2.16	26.21	183.4	0.283
191	-	33.87	3.02	2.28	150	7.31	33.79	3.28	2.20	26.45	161.7	0.369
230p	6.77	34.02	1.87	2.67	200	7.00	33.90	2.57	2.38	26.57	150.1	0.447
313p	6.15	33.98	1.23	2.97	250	6.62	34.02	1.68	2.76	26.72	136.9	0.519
520p	4.98	34.16	0.64	3.26	300	6.23	33.99	1.31	2.93	26.75	134.8	0.586
731p	5.07r	34.38	0.38	3.31	400	5.52	34.01	0.86	3.16	26.85	125.6	0.716
1023p	3.47	34.45	0.66	3.16	500	5.05	34.13	0.67	3.25	27.00	112.2	0.835
					600	4.69	34.27	0.49	3.29	27.16	98.4	0.941
					700	4.37	34.36	0.38	3.31	27.26	89.0	1.034
					800	4.06	34.41	0.42	3.30	27.33	82.7	1.121
					1000	3.52	34.45	0.63	3.18	27.42	75.2	1.279

203 BLACK DOUGLAS; September 12, 1949; 1554 GCT; 44°17'N, 126°46'W; sounding, 1600 fm; wind, 340°, force 4; weather, partly cloudy; sea, rough; wire angle, 24°.

0	17.30	31.77E	5.46	0.36	0	17.30	31.77	5.46	0.36	23.00	488.6	0.000
10	17.63	31.78	5.07	0.35	10	17.63	31.78	5.07	0.35	22.92	495.6	0.049
24	16.03	32.06	5.88	0.49	20	17.25	31.86	5.75	0.44	23.07	481.3	0.098
47	9.76	32.59	6.13	0.98	30	14.70	32.41	6.00	0.60	24.06	386.9	0.141
70	7.66	32.74	5.25	1.32	50	9.53	32.61	6.09	1.03	25.19	279.8	0.208
92	7.58	33.13	4.51	1.72	75	7.56	32.79	4.90	1.41	25.62	238.7	0.273
137	7.26	33.64	3.65	2.09	100	7.87	33.27	4.39	1.81	25.96	207.5	0.329
181	7.11	33.82	2.71	2.39	150	7.21	33.70	3.22	2.20	26.39	167.0	0.423
270	6.11	33.93	2.59	2.50	200	6.93	33.85	2.66	2.43	26.54	152.9	0.502
358	5.76	34.05	1.37	2.96	250	6.27	33.91	2.62	2.47	26.68	140.5	0.575
539	4.88	34.14	0.54	3.34	300	6.00	33.99	2.35	2.65	26.78	131.8	0.644
822	3.83	34.34	0.36	3.40	400	5.54	34.08	0.97	3.11	26.91	120.7	0.770
1170	3.12	34.45	0.44	3.42	500	5.05	34.12	0.63	3.31	27.00	112.9	0.887
					600	4.62	34.18	0.48	3.36	27.09	104.4	0.995
					700	4.23	34.25	0.39	3.38	27.19	95.6	1.095
					800	3.89	34.33	0.36	3.40	27.29	86.7	1.187
					1000	3.39	34.42	0.36	3.41	27.41	75.7	1.349

E Evaporation of all salinity samples occurred on Cruise 4909 on stations 201 through 410. Estimated average corrections to values given here can be made by subtracting 0.030‰ from the value of S, 0.025 from σ_t and by adding 2.2 to $10^5\delta$ at all depths; to ΔD add 0.002 for each 100 meter depth increment.

BLACK DOUGLAS; September 12, 1949; 2237 GCT; 44°14'N, 127°42'W; sounding, 1600 fm; wind, 350°, force 2; weather, clear; sea, rough; wire angle, missing. 204

OBSERVED Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	INTERPOLATED Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	COMPUTED σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m
0	18.26	31.78E	5.45	0.34	0	18.26	31.78	5.45	0.34	22.77	509.6	0.000
10	18.11	31.82	5.40	0.34	10	18.11	31.82	5.40	0.34	22.83	504.1	0.051
25	15.70	32.45	6.14	0.54	20	17.91	32.30	5.80	0.47	23.25	464.1	0.099
50	11.61	32.61	6.86	0.76	30	14.65	32.50	6.45	0.58	24.14	379.3	0.141
74	8.88	32.59	6.24	1.14	50	11.61	32.61	6.86	0.76	24.83	314.2	0.211
98	7.50	32.81	5.59	1.40	75	8.60	32.59	6.23	1.15	25.31	268.2	0.284
146	7.27	33.55	4.03	1.96	100	7.48	32.82	5.52	1.42	25.66	235.6	0.346
194	7.04	33.93	2.78	2.28	150	7.26	33.65	3.86	2.00	26.34	171.6	0.448
288	6.26	33.95	1.91	2.63	200	6.99	33.94	2.72	2.31	26.61	147.0	0.528
382	5.48	34.05	1.20	2.96	250	6.58	33.95	2.23	2.50	26.67	141.6	0.600
568	4.60	34.16	0.48	3.25	300	6.15	33.96	1.81	2.68	26.74	136.0	0.669
856	3.79	34.34	0.32	3.36	400	5.36	34.07	1.08	3.01	26.92	119.2	0.797
1199	3.04	34.47	0.53	3.33	500	4.86	34.13	0.64	3.18	27.02	109.9	0.912
					600	4.50	34.17	0.45	3.28	27.10	103.7	1.018
					700	4.20	34.24	0.36	3.34	27.18	96.0	1.118
					800	3.93	34.30	0.33	3.36	27.26	89.3	1.211
					1000	3.45	34.41	0.35	3.36	27.40	77.2	1.377

BLACK DOUGLAS; September 13, 1949; 0508 GCT; 44°12'N, 128°37'W; sounding, 1510 fm; wind, 030°, force 2; weather, cloudy; sea, smooth; wire angle, 10°. 205

0	17.71	32.52E	5.70	0.49	0	17.71	32.52	5.70	0.49	23.47	442.9	0.000
10	17.55	32.50	5.69	0.50	10	17.55	32.50	5.69	0.50	23.49	441.1	0.044
25	17.49	32.61	5.68	0.52	20	17.49	32.58	5.69	0.52	23.56	434.3	0.088
50	12.54	32.68	6.46	0.56	30	17.42	32.63	5.70	0.53	23.62	429.3	0.131
75	9.07	32.70	6.69	1.05	50	12.54	32.68	6.46	0.56	24.70	325.8	0.207
100	7.68	32.72	6.40	1.23	75	9.07	32.70	6.69	1.05	25.33	266.7	0.281
149	7.4e	33.22	4.97	1.65	100	7.68	32.72	6.40	1.23	25.55	245.8	0.345
197	–	33.68	4.12	1.91	150	7.45	33.23	4.94	1.65	25.99	205.4	0.457
294	6.30	33.89	2.96	2.13	200	7.18	33.70	4.10	1.92	26.39	167.4	0.551
389	5.45	33.93	1.52	2.73	250	6.75	33.83	3.53	2.03	26.55	152.8	0.631
579	4.52	34.16	0.60	2.99	300	6.25	33.89	2.87	2.15	26.67	142.4	0.705
872	3.75	34.38	0.48	3.10	400	5.36	33.94	1.43	2.77	26.82	128.8	0.840
1217	3.01	34.40	0.52	3.04	500	4.83	34.06	0.81	2.93	26.97	114.9	0.962
					600	4.45	34.18	0.58	3.00	27.11	102.7	1.070
					700	4.16	34.28	0.52	3.05	27.22	92.4	1.168
					800	3.91	34.35	0.50	3.09	27.30	85.4	1.257
					1000	3.44	34.40	0.50	3.08	27.39	77.9	1.421

BLACK DOUGLAS; September 13, 1949; 1208 GCT; 44°09'N, 129°33'W; sounding, 2000 fm; wind, 250°, force 1; weather, cloudy; sea, smooth; wire angle, 3°. 206

0	17.82	32.59E	5.64	0.47	0	17.82	32.59	5.64	0.47	23.48	440.7	0.000
10	17.48	32.50	5.69	0.46	10	17.48	32.50	5.69	0.46	23.50	439.7	0.044
25	17.49	32.50	5.62	0.48	20	17.49	32.50	5.65	0.47	23.50	440.1	0.088
50	14.74	32.61	6.38	0.56	30	17.39	32.52	5.67	0.49	23.55	436.6	0.132
75	9.57	32.72	6.46	0.97	50	14.74	32.61	6.38	0.56	24.20	373.8	0.213
100	8.40	32.79	6.18	1.14	75	9.57	32.72	6.46	0.97	25.27	272.9	0.294
150	7.74	33.55	6.40r	1.79	100	8.40	32.79	6.18	1.14	25.50	250.4	0.359
198	7.37	33.77	3.50	2.05	150	7.74	33.55	4.93	1.79	26.19	185.7	0.468
297	6.40	34.02	2.17	2.52	200	7.35	33.78	3.46	2.07	26.43	163.8	0.556
395	5.61	34.02	1.44	2.92	250	6.87	33.99	2.66	2.29	26.66	142.5	0.632
592	4.90	34.13	0.80	3.09	300	6.38	34.02	2.14	2.54	26.75	134.4	0.702
889	3.79	34.33	0.42	3.34	400	5.58	34.02	1.42	2.92	26.85	125.7	0.831
1234	3.12	34.45	0.50	3.18	500	5.09	34.10	1.06	3.04	26.98	114.8	0.951
					600	4.67	34.17	0.79	3.10	27.08	105.6	1.062
					700	4.32	34.23	0.60	3.21	27.16	98.1	1.163
					800	4.03	34.28	0.50	3.30	27.23	91.9	1.258
					1000	3.54	34.38	0.43	3.32	27.36	80.6	1.431

E See footnote page 208.

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

207 BLACK DOUGLAS; September 13, 1949; 1834 GCT; 44°06'N, 130°29'W; sounding, 1810 fm; wind, 190°, force 2; weather, slight intermittent drizzle; sea, rough; wire angle, 25°.

0	17.24	32.66E	5.60	0.44	0	17.24	32.66	5.60	0.44	23.68	422.3	0.000
10	17.11	32.65	5.28	0.39	10	17.11	32.65	5.28	0.39	23.71	420.5	0.042
23	17.14	32.68	5.66	0.40	20	17.13	32.67	5.60	0.40	23.72	419.8	0.084
46	13.96	32.66	6.03	0.54	30	17.11	32.68	5.80	0.42	23.74	418.8	0.126
68	9.60	32.63	6.18	0.95	50	11.75	32.65	6.08	0.61	24.83	313.8	0.199
89	8.19	32.66	5.74	1.10	75	9.07	32.63	6.13	1.00	25.28	272.1	0.273
133	8.06	32.97	5.39	1.29	100	8.14	32.72	5.63	1.15	25.49	252.0	0.338
174	7.75	33.90	4.10	1.82	150	7.98	33.40	4.95	1.47	26.04	200.3	0.451
258	6.62	33.86	3.05	2.14	200	7.42	33.91	3.74	1.96	26.53	155.0	0.540
343	5.87	33.96	1.97	2.58	250	6.72	33.86	3.15	2.12	26.58	150.0	0.616
515	4.53	34.04	1.07	2.89	300	6.22	33.89	2.44	2.30	26.67	142.0	0.690
784	3.83	34.22	0.40	3.20	400	5.33	34.00	1.60	2.72	26.87	124.0	0.822
1104	3.24	34.37	0.39	3.16	500	4.59	34.03	1.13	2.87	26.98	114.2	0.942
					600	4.26	34.10	0.76	3.02	27.07	106.2	1.052
					700	4.01	34.17	0.51	3.15	27.15	99.0	1.153
					800	3.78	34.23	0.40	3.20	27.22	93.0	1.251
					1000	3.40	34.33	0.39	3.18	27.34	82.6	1.426

208 BLACK DOUGLAS; September 14, 1949; 0133 GCT; 44°03'N, 131°24'W; sounding, 1950 fm; wind, 200°, force 2; weather, slight intermittent drizzle; sea, rough; wire angle, 15°.

0	17.42	32.68E	5.61	0.44	0	17.42	32.68	5.61	0.44	23.65	425.1	0.000
10	17.20	32.64	4.86	0.52	10	17.20	32.64	4.86	0.52	23.67	423.1	0.042
25	17.21	32.63	5.07	0.51	20	17.20	32.63	4.97	0.51	23.67	424.2	0.085
50	12.66	32.63	6.28	0.70	30	17.16	32.63	5.25	0.53	23.69	423.4	0.127
75	9.28	32.70	5.85	0.97	50	12.66	32.63	6.28	0.70	24.65	331.5	0.203
99	8.19	32.66	5.66	1.30	75	9.28	32.70	5.85	0.97	25.30	269.9	0.278
147	7.08	32.88	5.24	1.55	100	8.15	32.66	5.65	1.30	25.43	256.9	0.344
195	6.83	33.49	4.65	2.03	150	7.06	32.90	5.23	1.57	25.78	224.7	0.464
288	6.06	33.86	3.34	2.01r	200	6.81	33.55	4.60	2.05	26.32	173.8	0.564
381	5.13	33.54r	2.31	2.50	250	6.50	33.78	3.88	2.22	26.55	153.2	0.645
567	4.30	34.02	0.88	2.93	300	5.87	33.88	3.20	2.34	26.71	138.4	0.718
851	-	34.29	0.27	3.08	400	5.00	33.94	2.11	2.54	26.86	125.4	0.850
1191	3.02	34.47	0.47	3.07	500	4.53	33.98	1.29	2.78	26.94	117.2	0.971
					600	4.19	34.06	0.74	2.97	27.04	108.3	1.084
					700	3.91	34.18	0.45	3.03	27.17	97.1	1.187
					800	3.67	34.26	0.30	3.07	27.25	89.3	1.280
					1000	3.28	34.37	0.30	3.08	27.38	78.3	1.448

209 BLACK DOUGLAS; September 14, 1949; 0813 GCT; 44°01'N, 132°20'W; sounding, 1990 fm; wind, 200°, force 2; weather, partly cloudy; sea, slight; wire angle, 20°.

0	17.25	32.72E	5.74	0.43	0	17.25	32.72	5.74	0.43	23.73	418.0	0.000
10	17.09	32.74	5.80	0.51	10	17.09	32.74	5.80	0.51	23.78	413.3	0.042
25	17.10	32.65	5.70	0.51	20	17.11	32.66	5.73	0.51	23.72	420.0	0.083
50	12.60	32.70	6.63	0.75	30	17.08	32.65	5.73	0.52	23.71	420.4	0.125
75	9.22	32.70	6.48	1.05	50	12.60	32.70	6.63	0.75	24.71	325.6	0.200
97	8.30	32.70	6.45	1.13	75	9.22	32.70	6.48	1.05	25.31	268.9	0.274
128	6.82	33.06	5.86	1.43	100	8.22	32.70	6.43	1.16	25.46	254.6	0.340
151u	10.56r	33.62	4.93	1.62	150	6.82	33.61	5.07	1.60	26.37	168.8	0.446
211u	6.79	33.91	3.44	1.97	200	6.81	33.88	3.74	1.91	26.58	149.2	0.525
275u	-	34.02	2.05	2.65	250	6.47	34.00	2.41	2.41	26.73	136.4	0.596
434	5.07	34.04	1.00	2.99	300	6.06	34.03	1.79	2.73	26.80	129.6	0.663
719	3.86	34.22	0.54	3.18	400	5.29	34.03	1.13	2.93	26.90	121.4	0.788
1053	3.20	34.38	0.56	3.08	500	4.69	34.08	0.81	3.06	27.00	111.6	0.905
					600	4.25	34.15	0.63	3.15	27.11	102.6	1.012
					700	3.91	34.21	0.55	3.18	27.19	94.9	1.111
					800	3.66	34.28	0.55	3.18	27.27	87.8	1.202
					1000	3.29	34.37	0.56	3.11	26.38	78.4	1.368

E See footnote page 208.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	210
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	
BLACK DOUGLAS; September 14, 1949; 1613 GCT; 43°58'N, 133°15'W; sounding, 2,200 fms; wind, 220°, force 4; weather, cloudy; sea, very rough; wire angle, 5°.													
0	16.74	32.61E	5.69		0	16.74	32.61	5.69		23.76	415.1	0.000	
11	16.56	34.45r	5.74		10	16.56	32.64	5.74		23.82	408.8	0.041	
27	16.52	32.70	5.81		20	16.56	32.68	5.76		23.86	406.1	0.082	
53	10.72	32.74	6.50		30	16.45	32.70	5.82		23.90	402.4	0.122	
78	8.92	32.79	6.41		50	11.06	32.73	6.50		25.02	296.0	0.192	
103	8.17	32.77	6.33		75	9.04	32.79	6.43		25.40	259.8	0.262	
153	7.38	32.95	5.92		100	8.21	32.77	6.34		25.52	249.4	0.325	
190	7.02	33.77	4.86		150	7.43	32.90	5.96		25.73	229.5	0.445	
294	6.04	33.86	3.48		200	6.95	33.79	4.65		26.49	157.7	0.542	
501	4.42	34.02	1.87		250	6.55	33.84	3.93		26.59	149.3	0.618	
1153	3.02	34.40	0.37		300	5.95	33.86	3.39		26.68	140.8	0.691	
					400	4.97	33.94	2.58		26.86	124.2	0.823	
					500	4.42	34.02	1.90		26.99	112.9	0.942	
					600	4.02	34.09	1.05		27.08	104.3	1.051	
					700	3.73	34.17	0.55		27.18	96.0	1.150	
					800	3.51	34.23	0.46		27.25	89.8	1.244	
					1000	3.18	34.34	0.38		27.36	79.5	1.413	
BLACK DOUGLAS; September 11, 1949; 1247, 0938 GCT; 42°40'N, 125°15'W, 42°41'N, 125°20.5'W; sounding, 1,680 fms; wind, 320°, force 3; weather, cloudy; sea, very rough; wire angle, 5°, 32°.													301
0	15.74	32.68E	5.63	0.55	0	15.74	32.68	5.63	0.55	24.05	387.9	0.000	
10	15.32	32.99	4.78	0.78	10	15.32	32.99	4.78	0.78	24.37	356.9	0.037	
25	12.33	33.21	4.99	1.13	20	13.00	33.18	4.96	1.02	25.00	297.0	0.070	
50	7.40r	33.31	4.38r	1.48	30	12.03	33.24	4.99	1.22	25.24	275.1	0.099	
74	9.62	33.58	4.59	1.95	50	11.5	33.31	4.86	1.48	25.39	261.4	0.152	
98	8.88	33.77	3.52	2.31	75	9.62	33.59	4.56	1.96	25.94	209.4	0.211	
148	8.10	33.91	2.06	2.49	100	8.82	33.78	3.24	2.32	26.21	183.4	0.260	
197	7.65	33.87	2.07	2.45	150	8.07	33.91	2.05	2.49	26.43	163.4	0.346	
295	6.94	33.95	1.83	2.68	200	7.62	33.87	2.08	2.46	26.46	161.1	0.428	
393	6.18	34.05	1.12	2.96	250	7.25	33.90	2.02	2.54	26.54	154.2	0.507	
518p	5.73	34.13	0.70	3.19	300	6.89	33.96	1.80	2.69	26.64	145.7	0.581	
770p	6.77r	34.40	0.38	3.28	400	6.15	34.05	1.10	2.98	26.81	130.6	0.720	
1065p	3.41	34.45	0.54	3.29	500	5.79	34.11	0.75	3.17	26.90	122.8	0.846	
					600	5.39	34.26	0.53	3.22	27.07	107.9	0.962	
831	4.15	34.36r	0.32	3.26	700	4.88	34.36	0.40	3.27	27.20	95.0	1.063	
1004	3.68	34.34r	0.39	3.26	800	4.42	34.41	0.38	3.28	27.30	86.9	1.154	
1270	3.05	34.43r	0.67	3.18	1000	3.64	34.44	0.49	3.29	27.40	77.4	1.319	
1738	5.30r	34.52	1.28	3.01	1200	3.13	34.48	0.63	3.23	27.48	69.8	1.466	
2198	1.87	34.52	1.79	2.91	1500	2.60	34.51	0.93	3.08	27.55	63.5	1.667	
2677	1.75	34.42r	1.27r	3.18r	2000	2.01	34.52	1.65	2.95	27.61	58.1	1.970	
					2500	1.77	(34.52)	-	-	(27.63)	(56.7)	(2.258)	

E See footnote page 208.

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

302 BLACK DOUGLAS; September 11, 1949; 0407 GCT; 42°35'N, 125°54'W; sounding, 1,420 fms; wind, 350°, force 1; weather, overcast; sea, smooth; wire angle, 21°.

0	15.89	32.61E	6.14	0.50	0	15.89	32.61	6.14	0.50	23.95	396.0	0.000
10	16.07	32.63	5.59	0.52	10	16.07	32.63	5.59	0.52	23.93	399.1	0.040
24	12.78	32.88	5.72	0.86	20	15.32	32.87	5.69	0.74	24.28	365.8	0.078
47	8.61	32.81	5.60	1.21	30	10.64	32.84	5.72	0.97	25.18	280.7	0.110
69	8.20	33.04	5.21	1.46	50	8.50	32.82	5.58	1.26	25.51	249.2	0.163
91	8.96	33.58	4.21	1.93	75	8.23	33.50	5.05	1.57	26.08	195.2	0.219
135	7.74	33.69	2.43	2.09	100	8.60	33.60	3.58	2.00	26.11	193.5	0.267
177	7.45	33.95	2.08	2.44	150	7.61	33.76	2.31	2.19	26.38	168.1	0.358
264	6.64	34.04	1.61	2.66	200	7.31	34.01	1.95	2.49	26.62	146.2	0.436
350	5.82	34.05	0.98	2.91	250	6.85	34.04	1.69	2.62	26.70	138.6	0.508
520	5.14	34.23	0.50	3.17	300	6.19	34.04	1.36	2.77	26.79	130.5	0.574
794	4.15	34.33	0.40	3.16	400	5.60	34.10	0.75	3.02	26.91	120.1	0.700
1013	3.58	34.29r	0.70	2.96	500	5.22	34.21	0.51	3.16	27.05	108.3	0.814
					600	4.85	34.26	0.45	3.17	27.14	100.5	0.919
					700	4.48	34.30	0.40	3.17	27.21	93.9	1.015
					800	4.12	34.33	0.40	3.16	27.26	89.3	1.108
					1000	3.60	(34.40)	0.68	2.98	(27.37)	(79.9)	(1.277)

303 BLACK DOUGLAS; September 10, 1949; 2103 GCT; 42°30'N, 126°48'W; sounding, 1,900 fms; wind, 340°, force 2; weather, overcast; sea, slight; wire angle, 2°.

0	17.92	32.45E	5.91	0.48	0	17.92	32.45	5.91	0.48	23.32	452.7	0.000
10	16.08	32.77	6.17	0.53	10	16.08	32.77	6.17	0.53	24.04	388.9	0.042
25	13.27	33.17	6.05	1.12	20	14.62	33.04	6.15	0.80	24.57	338.9	0.079
50	6.75r	33.55	4.22	2.06	30	10.65	33.36	5.78	1.36	25.58	242.3	0.108
76	8.26	33.66	3.77	2.13	50	9.15	33.55	4.22	2.06	25.98	204.6	0.152
101	7.76	33.82	3.07	2.38	75	8.28	33.66	3.77	2.13	26.20	184.4	0.201
150	7.28	33.87	2.56	2.37	100	7.77	33.81	3.11	2.37	26.40	165.9	0.245
195	6.77	33.93	2.12	2.62	150	7.28	33.87	2.56	2.37	26.51	155.3	0.325
291	5.90	34.00	1.45	2.90	200	6.72	33.93	2.09	2.65	26.64	144.2	0.400
389	5.42	33.84r	0.98	3.18	250	6.23	33.96	1.71	2.81	26.72	135.5	0.469
585	4.56	34.22	0.54	3.34	300	5.85	34.01	1.40	2.92	26.81	128.5	0.536
880	3.81	34.36	0.48	3.42	400	5.33	34.09	0.95	3.20	26.94	117.5	0.659
1227	3.02	34.45	0.74	3.32	500	4.83	34.16	0.66	3.29	27.05	107.4	0.771
					600	4.52	34.23	0.54	3.34	27.14	99.6	0.875
					700	4.26	34.28	0.50	3.38	27.21	93.7	0.971
					800	4.00	34.33	0.49	3.40	27.28	87.9	1.062
					1000	3.51	34.40	0.55	3.41	27.38	78.8	1.229

304 BLACK DOUGLAS; September 10, 1949; 1448 GCT; 42°25'N, 127°41'W; sounding, 1,600 fms; wind, 320°, force, missing; weather, overcast; sea, smooth; wire angle, 4°.

0	18.95	31.71E	5.69	0.35	0	18.95	31.71	5.69	0.35	22.55	531.2	0.000
10	18.18	31.64	5.64	0.34	10	18.18	31.64	5.64	0.34	22.68	522.9	0.053
25	17.67	31.64	5.78	0.37	20	17.84	31.64	5.74	0.36	22.77	510.7	0.104
50	10.69	32.52	6.74	0.89	30	16.85	31.65	5.85	0.40	23.01	488.1	0.154
74	8.14	32.56	6.51	1.23	50	10.69	32.52	6.74	0.89	24.92	305.1	0.234
98	8.26	33.03	5.17	1.71	75	8.15	32.56	6.50	1.23	25.35	263.6	0.305
146	7.91	33.64	3.20	2.30	100	8.25	33.04	5.05	1.75	25.72	231.0	0.367
169p	7.84	33.78	2.71	2.49	150	7.91	33.68	3.07	2.34	26.27	178.3	0.468
290	6.76	34.02	1.67	2.83	200	7.65	33.84	2.43	2.63	26.44	163.6	0.554
385	6.08	34.11	1.10	2.96	250	7.18	33.94	2.02	2.77	26.58	150.3	0.632
577	4.89	34.16	1.07	3.34	300	6.68	34.03	1.58	2.85	26.72	137.6	0.705
798p	4.31	34.31	0.40	3.46	400	5.95	34.11	1.10	2.98	26.88	123.6	0.835
1156p	3.30	34.36	0.60	3.43	500	5.21	34.12	1.09	3.19	26.98	114.9	0.954
					600	4.85	34.18	1.06	3.36	27.07	107.2	1.065
					700	4.60	34.26	0.64	3.44	27.16	99.2	1.168
					800	4.31	34.31	0.40	3.46	27.23	93.1	1.264
					1000	3.66	34.35	0.45	3.45	27.33	84.2	1.442

E See footnote page 208.

BLACK DOUGLAS; September 10, 1949; 0758 GCT; 42°21'N, 128°35'W; sounding, 1,750 fms; wind, 350°, force 1; weather, cloudy; sea, moderate; wire angle, 3°. 305

OBSERVED Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	INTERPOLATED Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	COMPUTED σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m
0	18.54	31.72E	5.69	0.39	0	18.54	31.72	5.69	0.39	22.66	520.1	0.000
10	18.36	31.73	5.31	0.38	10	18.36	31.73	5.31	0.38	22.71	525.3	0.052
25	17.99	31.76	5.44	-	20	18.12	31.76	5.35	0.39	22.80	508.6	0.104
50	12.67	32.68	6.36	0.65	30	17.85	31.92	5.62	0.42	22.98	491.1	0.154
75	9.34	32.81	5.88	1.24	50	12.67	32.68	6.36	0.65	24.69	340.2	0.237
100	8.60	33.10	5.38	1.51	75	9.34	32.81	5.88	1.24	25.37	263.0	0.312
148	7.72	33.58	3.88	2.00	100	8.60	33.10	5.38	1.51	25.72	230.4	0.374
193	7.02	33.87	3.20	2.27	150	7.68	33.59	3.85	2.02	26.24	181.7	0.477
286	6.00	33.93	2.31	2.64	200	6.93	33.88	3.12	2.31	26.57	150.8	0.560
381	5.70	34.05	1.08	3.12	250	6.32	33.90	2.65	2.50	26.67	142.0	0.633
503p	5.09	34.10	0.67	3.36	300	5.93	33.94	2.19	2.71	26.75	134.7	0.703
841p	4.06u	34.23r	0.43	3.38	400	5.64	34.06	0.98	3.18	26.88	123.7	0.831
1191p	3.13	34.29r	0.63	3.35	500	5.10	34.10	0.68	3.36	26.97	114.9	0.951
					600	4.75	-	0.55	3.37	-	-	-
					700	4.45	-	0.46	3.38	-	-	-
					800	4.15	-	0.43	3.38	-	-	-
					1000	3.60	-	0.46	3.37	-	-	-

BLACK DOUGLAS; September 10, 1949; 0128 GCT; 42°16'N, 129°29'W; sounding, 1,800 fms; wind, 360°, force 2; weather, partly cloudy; sea, moderate; wire angle, 4°. 306

0	18.29	32.03E	5.39	0.39	0	18.29	32.03	5.39	0.39	22.95	492.5	0.000
10	18.62	31.98	5.21	0.43	10	18.62	31.98	5.21	0.43	22.85	503.1	0.050
25	18.13	32.34	4.40	0.46	20	18.33	32.20	4.48	0.45	23.06	481.5	0.099
50	11.67	32.70	5.33	0.66	30	17.93	32.51	4.43	0.47	23.40	449.6	0.146
75	9.02	32.69	5.79	1.05	50	11.67	32.70	5.33	0.66	24.89	308.5	0.221
100	7.91	32.72	5.52	1.21	75	9.02	32.69	5.79	1.05	25.33	266.6	0.293
149	7.53	33.22	4.64	1.62	100	7.91	32.72	5.52	1.21	25.52	249.0	0.358
197	7.67	33.77	2.90	2.10	150	7.51	33.22	4.63	1.63	25.97	207.0	0.471
293	6.76	33.98	2.02	2.56	200	7.64	33.79	2.89	2.12	26.40	167.2	0.565
388	5.88	34.04	1.30	2.90	250	7.16	33.92	2.40	2.39	26.57	151.5	0.645
583	4.61	34.09	0.63	3.16	300	6.68	33.99	1.98	2.59	26.69	140.5	0.717
880	3.94	34.34	0.39	3.33	400	5.75	34.05	1.23	2.93	26.86	125.6	0.850
1228	3.04	34.47	0.64	3.19	500	5.00	34.07	0.84	3.08	26.96	116.1	0.971
					600	4.56	34.09	0.60	3.18	27.03	110.3	1.084
					700	4.34	34.18	0.45	3.25	27.12	102.0	1.191
					800	4.12	34.29	0.40	3.31	27.23	92.2	1.288
					1000	3.63	34.39	0.43	3.31	27.36	80.9	1.461

BLACK DOUGLAS; September 9, 1949; 1910 GCT; 42°11'N, 130°22'W; sounding, 1,900 fms; wind, 340°, force 1; weather, overcast; sea, moderate; wire angle, 20°. 307

0	18.22	32.70E	5.60	0.46	0	18.22	32.70	5.60	0.46	23.48	442.0	0.000
10	17.87	32.70	5.61	0.46	10	17.87	32.70	5.61	0.46	23.56	434.3	0.044
25	17.77	32.66	5.62	0.51	20	17.81	32.68	5.61	0.49	23.57	434.1	0.087
50	13.26	32.61	6.96	0.72	30	17.76	32.64	5.63	0.54	23.54	436.3	0.131
74	9.34	32.61	6.64	1.03	50	13.26	32.61	6.96	0.72	24.51	344.3	0.209
99	8.21	32.56	6.43	1.17	75	9.29	32.61	6.64	1.04	25.23	276.4	0.286
146	7.70	32.97	5.62	1.46	100	8.21	32.56	6.42	1.18	25.35	265.1	0.354
194	7.21	33.60	4.90	1.69	150	7.68	33.02	5.56	1.48	25.79	224.0	0.476
289	6.38	33.86	3.28	2.15	200	7.18	33.63	4.82	1.72	26.34	172.7	0.576
384	5.33	33.93	2.14	2.67	250	6.85	33.79	3.95	1.96	26.51	157.2	0.662
574	4.41	34.05	1.28	3.10	300	6.22	33.87	3.12	2.21	26.65	143.7	0.733
859	3.70	34.29	0.40	3.23	400	5.20	33.94	2.02	2.74	26.84	127.0	0.868
1194	2.96	34.45	0.60	3.32	500	4.68	33.99	1.59	3.00	26.94	118.0	0.991
					600	4.35	34.08	1.18	3.12	27.04	108.7	1.104
					700	4.08	34.17	0.78	3.18	27.14	99.8	1.208
					800	3.84	34.25	0.48	3.21	27.23	92.1	1.304
					1000	3.40	34.38	0.44	3.27	27.38	78.9	1.475

E See footnote page 208.

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
308	BLACK DOUGLAS; September 9, 1949; 1205 GCT; 42°06'N, 131°16'W; sounding, 2,000 fms; wind, 340°, force 1; weather, overcast; sea, smooth; wire angle, 5°.											
0	17.65	32.63E	5.67	0.59	0	17.65	32.63	5.67	0.59	23.57	436.2	0.000
10	17.51	32.61	5.68	0.57	10	17.51	32.61	5.68	0.57	23.58	432.5	0.043
25	17.34	32.61	5.71	0.61	20	17.40	32.61	5.71	0.59	23.60	430.0	0.087
49	11.48	32.63	6.65	0.81	30	17.28	32.61	5.77	0.65	23.63	427.7	0.130
73	9.77	32.72	6.25	0.95	50	11.48	32.63	6.65	0.81	24.86	310.4	0.203
98	8.69	32.70	6.34	1.17	75	9.67	32.72	6.25	0.97	25.25	274.9	0.276
146	7.29	32.88	5.84	1.50	100	8.58	32.70	6.35	1.20	25.41	259.8	0.343
195	7.13	33.51	4.94	1.75	150	7.29	32.91	5.77	1.53	25.76	226.9	0.464
292	6.10	33.87	3.16	2.19	200	7.07	33.56	4.85	1.78	26.30	176.5	0.566
388	5.22	33.91	1.81	2.88	250	6.53	33.81	3.91	1.98	26.57	151.3	0.648
581	4.46	34.11	0.95	3.32	300	6.02	33.87	3.05	2.24	26.68	141.1	0.720
872	-	34.23	0.41	3.40	400	5.14	33.92	1.71	2.94	26.83	127.8	0.855
1218	2.99	34.40	0.52	3.39	500	4.74	34.04	1.20	3.22	26.97	115.2	0.976
					600	4.40	34.12	0.90	3.34	27.07	106.3	1.087
					700	4.10	34.18	0.63	3.38	27.15	99.3	1.190
					800	3.82	34.21	0.46	3.39	27.20	94.8	1.287
					1000	3.37	34.29	0.41	3.40	27.31	85.3	1.467
309	BLACK DOUGLAS; September 9, 1949; 0453 GCT; 42°02'N, 132°10'W; sounding, 2,210 fms; wind, 330°, force 2; weather, cloudy; sea, moderate; wire angle, 18°.											
0	17.62	32.73E	5.29	0.65	0	17.62	32.73	5.29	0.65	23.65	426.1	0.000
9	17.48	32.57	5.39	0.67	10	17.48	32.57	5.39	0.65	23.56	434.0	0.048
23	17.41	32.71	5.37	0.65	20	17.41	32.68	5.36	0.66	23.66	417.9	0.091
45	13.28	32.70	6.42	0.68	30	16.65	32.71	5.41	0.65	23.86	406.3	0.132
66	10.39	32.77	6.20	0.88	50	12.40	32.70	6.41	0.71	24.75	322.1	0.205
88	8.91	32.72	5.58	1.07	75	10.20	32.75	5.87	0.96	25.19	280.4	0.280
131	7.59	32.70	6.34	1.30	100	8.20	32.71	5.65	1.15	25.47	253.7	0.347
175	7.19	33.11	5.54	1.52	150	7.39	32.75	6.17	1.40	25.62	240.2	0.470
265	6.67	33.86	3.41	2.00	200	7.03	33.50	4.75	1.64	26.26	180.3	0.576
357	5.68	33.93	2.36	2.51	250	6.76	33.82	3.62	1.91	26.54	153.7	0.659
541	4.63	34.05	1.11	2.94	300	6.28	33.90	2.99	2.21	26.67	142.0	0.732
820	3.80	34.27	0.32	3.22	400	5.38	33.94	2.02	2.65	26.82	129.1	0.868
1150	3.11	34.34	0.56	3.23	500	4.82	34.01	1.36	2.88	26.93	118.3	0.992
					600	4.40	34.10	0.80	3.02	27.05	107.8	1.105
					700	4.10	34.18	0.46	3.13	27.15	99.3	1.208
					800	3.84	34.26	0.33	3.22	27.24	91.4	1.304
					1000	3.40	34.32	0.40	3.22	27.33	83.4	1.478

E See footnote page 208.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

BLACK DOUGLAS; September 8, 1949; 2212, 1925 GCT; 41°57'N, 133°05'W; sounding, 2,200 fms; wind, 290°, force 2; weather, cloudy; sea, moderate; wire angle, 11°, 16°. 310

0	17.94	32.81E	5.52	0.60	0	17.94	32.81	5.52	0.60	23.63	427.4	0.000	
10	17.76	32.79	5.35	0.60	10	17.76	32.79	5.35	0.60	23.66	424.9	0.043	
25	17.76	32.80	-	0.58	20	17.78	32.80	5.40	0.59	23.66	424.9	0.085	
49	12.06	32.75	5.74	0.80	30	17.72	32.80	5.55	0.59	23.68	424.0	0.128	
73	9.84	32.75	5.73	1.02	50	11.60	32.75	5.75	0.80	24.94	303.9	0.200	
98	8.98	32.78	5.71	1.12	75	9.77	32.76	5.73	1.03	25.27	273.4	0.272	
147	7.39	32.77	5.52	1.38	100	8.86	32.78	5.70	1.13	25.42	257.9	0.339	
196	7.16	33.54	4.87	1.67	150	7.35	32.77	5.50	1.40	25.64	238.3	0.463	
294	7.03	33.89	3.44	2.08	200	7.15	33.59	4.75	1.70	26.31	175.3	0.567	
392	5.86	33.91	2.63	2.58	250	7.16	33.84	3.92	1.92	26.51	157.5	0.649	
588	4.31	34.09	0.85	3.19	300	7.00	33.89	3.40	2.11	26.57	152.4	0.727	
882	3.67	34.33	0.33	3.37	400	5.76	33.92	2.55	2.63	26.75	135.3	0.871	
1226	2.94	34.44	0.53	3.29r	500	4.74	34.01	1.32	3.04	26.94	117.4	0.997	
					600	4.28	34.10	0.80	3.21	27.06	106.5	1.109	
966	3.44r	34.34r	~~2.56~~ .32	~~2.78~~ 3.32	700	4.06	34.19	0.51	3.31	27.16	98.0	1.211	
1159	3.08	34.42	~~2.08~~ .42	~~2.82~~ 3.25	800	3.85	34.28	0.36	3.36	27.25	90.0	1.305	
1449	2.56	34.47	~~1.60~~ .74	~~3.00~~ 3.19	1000	3.42	34.37	0.35	3.36	27.37	79.9	1.475	
1939	1.97	34.54	~~0.74~~ 1.60	~~3.19~~ 3.00	1200	3.00	34.43	0.50	3.24	27.45	72.1	1.628	
2435	1.78	34.61	~~0.42~~ 2.08	~~3.25~~ 2.82	1500	2.46	34.48	0.81	3.18	27.56	64.7	1.833	
2934	1.62	34.61	~~0.32~~ 2.56	~~3.32~~ 2.73	2000	1.94	34.55	1.66	2.98	27.64	55.0	2.131	
					2500	1.76	34.61	2.14	2.80	27.70	50.1	2.396	

BLACK DOUGLAS; September 5, 1949; 0400 GCT; 40°50'N, 124°47'W; sounding, 1,000 fms; wind, 140°, force 2; weather, low fog; sea, rough; wire angle, 8°. 401

0	12.90	32.92E	6.23	-	0	12.90	32.92	6.23	(0.83)	24.82	313.6	0.000	
11	12.35	32.86	5.31	0.92	10	12.36	32.86	5.31	0.92	24.88	308.3	0.031	
27	9.14	32.81	5.76	1.31	20	9.26	32.82	5.53	1.17	25.40	259.7	0.060	
54	9.56r	33.66	4.46	1.80	30	9.11	32.81	5.76	1.39	25.41	258.5	0.085	
81	-	33.80	3.30	2.11	50	8.94	33.60	5.00	1.75	26.05	197.9	0.131	
108	8.51	33.86	2.63	2.24	75	8.77	33.78	3.48	2.07	26.22	182.2	0.179	
160	7.88	33.93	2.12	2.32	100	8.57	33.84	2.81	2.22	26.30	175.3	0.223	
212	7.37	34.04	1.78	2.42	150	7.98	33.92	2.21	2.30	26.45	161.5	0.307	
314	6.60	34.05	1.19	2.67	200	7.46	34.03	1.85	2.39	26.61	146.6	0.385	
415	5.98	34.20	0.81	2.80	250	7.06	34.05	1.55	2.52	26.69	140.6	0.456	
617	4.93	34.22	0.52	2.99	300	6.69	34.05	1.28	2.64	26.74	136.3	0.526	
918	4.11	34.40	0.39	3.02	400	6.07	34.18	0.87	2.78	26.92	119.8	0.654	
1267	3.12	34.47	0.71	2.98	500	5.46	34.21	0.67	2.89	27.02	111.3	0.769	
					600	4.99	34.21	0.55	2.98	27.07	106.6	0.878	
					700	4.68	34.25	0.48	3.02	27.14	100.8	0.982	
					800	4.43	34.32	0.42	3.02	27.22	93.6	1.079	
					1000	3.85	34.42	0.43	3.02	27.36	81.4	1.254	

OCEANIC OBSERVATIONS OF THE PACIFIC, 1949

1. Page 215, Cruise 4909, Station 310

Observed oxygen and phosphate values of second cast should be corrected as follows:

Z	O_2	PO_4-P
966	0.32	3.32
1159	0.42	3.25
1449	0.74	3.19
1939	1.60	3.00
2435	2.08	2.82
2934	2.56	2.73

E See footnote page 208.

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
402	BLACK DOUGLAS; September 5, 1949; 1115 GCT; 40°41'N, 125°41'W; sounding, 1,600 fms; wind, 140°, force 2; weather, overcast; sea, rough; wire angle, 0°.											
0	15.0	32.79E	6.04	0.79	0	15.0	32.79	6.04	0.79	24.29	364.5	0.000
11	14.93	32.79	-	-	10	14.92	32.79	6.01	0.79	24.31	363.0	0.036
27	14.04	32.94	5.98	0.80	20	14.70	32.94	5.98	0.79	24.47	347.9	0.072
53	11.64	32.72	6.40	0.86	30	14.47	32.93	6.00	0.80	24.51	344.2	0.107
79	-	32.77	5.89	1.28	50	12.45	32.72	6.38	0.85	24.75	321.5	0.173
105	8.51	33.31	4.54	1.70	75	9.55	32.76	6.05	1.19	25.30	269.6	0.247
158	-	33.71	3.12	2.26	100	8.65	33.21	4.83	1.64	25.79	222.9	0.309
209	6.99	33.95	2.60	2.49	150	7.63	33.66	3.25	2.20	26.30	176.0	0.409
312	6.27	34.00	1.28	2.79	200	7.04	33.91	2.70	2.47	26.58	150.2	0.490
413	5.56	34.13	0.84	3.07	250	6.69	33.97	2.07	2.61	26.67	141.5	0.563
617	4.56	34.22	0.34	3.24	300	6.35	33.99	1.40	2.75	26.73	136.3	0.632
928	3.81	34.38	0.50	3.32	400	5.67	34.12	0.90	3.05	26.92	119.5	0.760
1295	2.95	34.36	0.89	3.22	500	5.05	34.15	0.56	3.17	27.02	110.7	0.875
					600	4.61	34.21	0.35	3.23	27.12	102.1	0.982
					700	4.36	34.27	0.34	3.27	27.18	95.5	1.080
					800	4.12	34.33	0.39	3.30	27.26	89.3	1.173
					1000	3.65	34.38	0.56	3.31	27.35	82.0	1.344
403	BLACK DOUGLAS; September 5, 1949; 2338 GCT; 40°32'N, 126°32'W; sounding, 1,710 fms; wind, 140°, force 1; weather, overcast; sea, very rough; wire angle, 0°.											
0	18.1	32.18E	5.17	0.48	0	18.1	32.18	5.17	0.48	23.11	476.7	0.000
10	17.63	32.23	5.59	0.47	10	17.63	32.23	5.59	0.47	23.27	462.9	0.047
25	17.55	32.18	5.64	0.48	20	17.61	32.21	5.63	0.47	23.26	464.1	0.093
50	14.36	32.79	6.36	0.62	30	17.35	32.18	5.67	0.49	23.30	460.4	0.140
75	9.85	32.88	5.91	1.17	50	14.36	32.79	6.36	0.62	24.44	351.9	0.221
101	8.43	33.06	5.31	1.56	75	9.85	32.88	5.91	1.17	25.34	265.6	0.298
151	-	33.60	3.90	2.10	100	8.44	33.06	5.30	1.55	25.71	231.2	0.360
200	7.67	33.93	2.84	2.39	150	8.04	33.59	3.90	2.09	26.18	187.0	0.464
296	6.44	34.04	1.90	2.72	200	7.67	33.93	2.84	2.39	26.51	157.0	0.551
392	5.83	34.04	1.19	3.06	250	6.90	34.02	2.29	2.57	26.68	140.7	0.625
585	4.70	34.22	0.35	3.30	300	6.42	34.04	1.87	2.74	26.76	133.6	0.694
878	3.85	34.34	0.70	3.44	400	5.77	34.04	1.13	3.08	26.84	126.6	0.823
1224	2.93	34.49	0.67	3.41	500	5.08	34.14	0.57	3.23	27.01	111.8	0.942
					600	4.65	34.23	0.37	3.31	27.13	101.1	1.050
					700	4.36	34.27	0.50	3.38	27.19	95.5	1.148
					800	4.07	34.31	0.65	3.42	27.25	90.2	1.241
					1000	3.52	34.39	0.70	3.44	27.37	79.8	1.410
404	BLACK DOUGLAS; September 6, 1949; 0656 GCT; 40°23'N, 127°22'W; sounding, 1,120 fms; wind, 140°, force 1; weather, overcast; sea, very rough; wire angle, 0°.											
0	18.05	32.18E	5.30	0.38	0	18.05	32.18	5.30	0.38	23.13	475.6	0.000
11	17.56	32.16	5.23	0.41	10	17.57	32.16	5.23	0.41	23.22	466.4	0.047
27	17.44	32.20	5.15	0.39	20	17.52	32.17	5.18	0.40	23.25	464.7	0.094
54	13.46	32.72	5.81	0.60	30	17.30	32.21	5.15	0.39	23.33	457.3	0.140
81	10.03	32.79	5.74	0.99	50	14.20	32.45	5.78	0.54	23.99	374.4	0.223
108	8.36	33.13	5.19	1.47	75	10.70	32.78	5.76	0.90	25.12	286.9	0.306
160	8.17	33.68	2.97	2.10	100	8.40	32.89	5.40	1.31	25.50	250.7	0.373
212	7.62	33.95	1.87	2.31	150	8.20	33.50	3.44	2.03	26.09	195.9	0.484
314	6.02	33.86	1.95	2.53	200	7.85	33.93	1.94	2.28	26.48	159.7	0.574
418	5.42	34.05	0.98	2.88	250	6.61	33.93	1.86	2.40	26.65	143.5	0.649
627	4.53	34.20	0.62	3.19	300	6.08	33.87	1.94	2.50	26.67	141.7	0.720
954	3.64	34.45	0.44	3.19	400	5.51	34.02	1.12	2.83	26.86	124.8	0.853
1316	2.94	34.52	0.56	3.26	500	5.01	34.12	0.75	3.06	27.00	112.5	0.972
					600	4.62	34.18	0.64	3.18	27.09	104.5	1.080
					700	4.28	34.26	0.55	3.19	27.19	95.3	1.180
					800	4.00	34.34	0.50	3.19	27.28	87.1	1.271
					1000	3.54	34.47	0.46	3.20	27.43	74.1	1.433

E See footnote page 208.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

BLACK DOUGLAS; September 6, 1949; 1400 GCT; 40°15'N, 128°14'W; sounding, 2,200 fms; wind, 240°, force 2; weather, overcast; sea, smooth; wire angle, 3°. 405

0	18.43	32.56E	5.57	0.52	0	18.43	32.56	5.57	0.52	23.32	457.1	0.000
11	18.4	34.31r	5.56	0.49	10	18.15	32.60	5.56	0.49	23.42	447.7	0.045
27	17.43	32.66	5.54	0.52	20	17.75	32.64	5.54	0.50	23.54	435.9	0.089
54	13.07	32.75	6.57	0.64	30	17.10	32.67	5.55	0.53	23.73	419.3	0.132
81	10.54	32.79	6.41	0.90	50	13.80	32.74	6.53	0.61	24.51	345.3	0.209
108	9.31	32.79	4.72	1.06	75	10.95	32.79	6.50	0.85	25.09	290.3	0.288
160	-	33.43	6.14r	1.77	100	9.56	32.79	5.52	1.03	25.32	268.1	0.358
252	7.60	33.93	2.28	2.52	150	8.51	33.27	3.47	1.56	25.86	217.6	0.479
357	6.76	34.07	1.46	2.82	200	7.98	33.73	2.82	2.26	26.30	176.5	0.578
460	5.76	34.13	0.91	3.16	250	7.62	33.92	2.30	2.51	26.50	158.0	0.661
664	4.78	34.25	0.72	3.39	300	7.25	34.01	1.90	2.66	26.63	146.8	0.737
924	4.09	34.42	0.40	3.42	400	6.35	34.10	1.20	2.97	26.82	129.5	0.875
1278	3.10	34.49	0.79	3.42	500	5.50	34.15	0.85	3.23	26.97	115.8	0.998
					600	5.02	34.21	0.79	3.35	27.07	107.0	1.110
					700	4.69	34.28	0.64	3.39	27.16	98.6	1.212
					800	4.41	34.36	0.48	3.40	27.26	90.2	1.307
					1000	3.86	34.44	0.45	3.42	27.38	80.0	1.477

BLACK DOUGLAS; September 6, 1949; 2020 GCT; 40°05'N, 129°04'W; sounding, 2,500 fms; wind, calm; weather, cloudy; sea, rough; wire angle, 5°. 406

0	18.7	32.63E	5.50	0.50	0	18.7	32.63	5.50	0.50	23.31	458.2	0.000
10	18.45	32.63	5.51	0.51	10	18.45	32.63	5.51	0.51	23.37	452.6	0.046
25	18.05	32.77	5.59	0.54	20	18.20	32.75	5.55	0.53	23.52	438.2	0.090
50	14.50	32.81	6.31	0.61	30	17.90	32.78	5.73	0.55	23.62	429.5	0.133
75	11.60	32.81	6.12	1.05	50	14.50	32.81	6.31	0.61	24.41	354.2	0.212
100	9.77	32.97	5.81	1.31	75	11.60	32.81	6.12	1.05	24.98	300.1	0.294
150	8.5	33.55	4.23	1.94	100	9.77	32.97	5.81	1.31	25.43	258.5	0.363
199	8.46	33.86	2.68	2.43	150	8.5	33.55	4.23	1.94	26.07	196.0	0.477
297	7.18	33.98	1.99	2.69	200	8.45	33.86	2.66	2.43	26.33	173.7	0.570
394	6.54	34.07	1.42	2.98	250	7.75	33.94	2.30	2.55	26.50	158.5	0.652
590	4.69	34.11	0.74	3.29	300	7.15	33.98	1.97	2.70	26.62	147.7	0.728
890	3.87	34.34	0.34	3.46	400	6.50	34.07	1.40	3.00	26.78	133.6	0.869
1239	3.08	34.51	0.65	3.53	500	5.62	34.08	1.02	3.18	26.89	123.0	0.998
					600	4.62	34.12	0.71	3.30	27.04	108.9	1.114
					700	4.31	34.19	0.50	3.38	27.13	101.0	1.219
					800	4.08	34.27	0.38	3.43	27.22	93.2	1.316
					1000	3.55	34.41	0.40	3.49	27.39	78.5	1.487

BLACK DOUGLAS; September 7, 1949; 0257 GCT; 39°56'N, 129°55'W; sounding, 2,300 fms; wind, 020°, force 1; weather, overcast; sea, very rough; wire angle, 0°. 407

0	18.91	32.35E	5.23	0.46	0	18.91	32.35	5.23	0.46	23.04	483.3	0.000
11	18.58	32.41	5.13	0.47	10	18.60	32.40	5.14	0.47	23.16	472.9	0.048
27	18.37	32.50	3.70r	0.50	20	18.51	32.46	5.15	0.49	23.22	466.6	0.095
52	14.24	32.95	5.31	0.67	30	18.10	32.54	5.20	0.51	23.38	451.4	0.141
78	10.56	32.84	5.19	1.12	50	14.45	32.95	5.31	0.66	24.53	342.8	0.220
104	9.57	33.07	5.09	1.40	75	10.70	32.84	5.22	1.09	25.17	282.4	0.298
156	8.6	33.58	3.40	2.06	100	9.67	33.05	5.12	1.36	25.51	250.6	0.365
208	8.18	33.86	2.42	2.43	150	8.63	33.50	3.61	1.99	26.02	202.3	0.478
311	6.95	34.02	1.54	2.64	200	8.30	33.84	2.53	2.41	26.34	172.9	0.572
414	6.16	34.10	1.00	2.99	250	7.62	33.94	1.99	2.50	26.52	156.5	0.654
618	5.16	34.20	0.54	3.28	300	7.06	34.01	1.62	2.61	26.65	144.2	0.729
926	3.91	34.36	0.36	3.34	400	6.24	34.09	1.06	2.94	26.82	128.9	0.865
1289	3.10	34.49	0.60	3.41	500	5.72	34.15	0.75	3.18	26.94	119.2	0.989
					600	5.24	34.19	0.55	3.28	27.03	111.3	1.105
					700	4.78	34.24	0.45	3.30	27.12	102.8	1.212
					800	4.38	34.29	0.38	3.32	27.21	95.2	1.311
					1000	3.68	34.39	0.37	3.35	27.36	81.4	1.488

E See footnote page 208.

S10

CCOFI
4909

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

408 BLACK DOUGLAS; September 7, 1949; 1006 GCT; 39°47'N, 130°46'W; sounding, 2,460 fm; wind, 020°, force 1; weather, precipitation; sea, moderate; wire angle, 0°.

0	18.46	32.83E	4.38r	0.50	0	18.46	32.83	(5.85)	0.50	23.52	437.7	0.000
10	18.29	32.84	5.84	0.52	10	18.29	32.84	5.84	0.52	23.57	433.6	0.043
26	18.28	32.83	4.04r	0.52	20	18.28	32.84	5.85	0.52	23.57	433.6	0.087
52	12.34	32.83	4.44r	0.59	30	18.15	32.83	5.85	0.53	23.60	431.5	0.130
79	9.95	32.79	5.94	0.92	50	12.50	32.83	5.87	0.58	24.83	314.1	0.205
105	8.27	32.78	5.36	1.24	75	10.21	32.79	5.95	0.84	25.21	278.0	0.279
158	-	33.26	4.23r	1.50	100	8.90	32.78	5.43	1.20	25.42	258.7	0.346
210	7.34	33.78	3.92	1.88	150	7.80	33.03	4.74	1.45	25.78	225.0	0.466
314	6.26	33.92	2.59	2.37	200	7.43	33.75	4.05	1.80	26.40	167.2	0.565
417	5.33	33.98	1.74	2.82	250	6.93	33.85	3.40	2.08	26.54	153.9	0.645
624	4.28	34.20	1.47	3.26	300	6.42	33.91	2.76	2.31	26.66	143.2	0.719
930	3.53	34.40	0.37	3.38	400	5.47	33.97	1.83	2.75	26.83	127.3	0.854
1293	2.88	34.49	0.60	3.37	500	4.79	34.07	1.57	3.08	26.99	113.5	0.974
					600	4.37	34.18	1.50	3.24	27.12	101.4	1.082
					700	4.06	34.26	1.28	3.32	27.21	92.8	1.179
					800	3.82	34.32	0.80	3.36	27.29	86.6	1.268
					1000	3.37	34.44	0.40	3.38	27.43	74.1	1.430

409 BLACK DOUGLAS; September 7, 1949; 1720 GCT; 39°38'N, 131°36'W; sounding, 2,440 fm; wind, calm; weather, cloudy; sea, calm; wire angle, 3°.

0	18.51	32.65E	5.56	0.53	0	18.51	32.65	5.56	0.53	23.37	452.1	0.000
10	18.24	32.65	5.69	0.56	10	18.24	32.65	5.69	0.56	23.43	446.5	0.045
25	18.00	32.69	5.63	0.61	20	18.10	32.66	5.65	0.60	23.48	442.3	0.089
50	12.39	32.65	6.86	0.64	30	17.70	32.69	5.69	0.62	23.59	431.3	0.133
75	10.52	32.68	6.40	0.87	50	12.39	32.65	6.86	0.64	24.70	325.5	0.209
100	9.24	32.66	6.26	1.09	75	10.52	32.68	6.40	0.87	25.07	290.8	0.286
151	8.72	32.91	5.70	1.35	100	9.24	32.66	6.26	1.09	25.28	272.1	0.356
201	7.82	33.66	4.20	1.96	150	8.73	32.89	5.73	1.35	25.53	248.9	0.486
302	6.64	33.91	-	2.36	200	7.83	33.66	4.22	1.95	26.27	179.3	0.594
403	5.68	33.87	1.65	2.71	250	7.21	33.83	3.26	2.18	26.49	159.0	0.678
605	4.69	34.09	0.59	3.38	300	6.64	33.91	2.67	2.35	26.63	146.0	0.754
912u	6.03r	34.23r	0.32	3.51	400	5.72	33.87	1.68	2.70	26.72	138.6	0.896
1169p	3.28	34.40	0.60	3.46	500	5.15	33.95	1.00	3.08	26.85	126.7	1.029
					600	4.71	34.08	0.61	3.37	27.00	112.9	1.149
					700	4.37	34.20	0.42	3.47	27.13	100.0	1.255
					800	4.09	34.28	0.35	3.50	27.23	92.6	1.352
					1000	3.60	34.37	0.37	3.51	27.35	82.0	1.526

410 BLACK DOUGLAS; September 7, 1949; 0015 GCT; 39°29'N, 132°27'W; sounding, 2,300 fm; wind, calm; weather, cloudy; sea, calm; wire angle, 13°.

0	19.7	32.86E	5.52	0.43	0	19.7	32.86	5.52	0.43	23.23	465.7	0.000
10	18.78	32.83	5.52	0.48	10	18.78	32.83	5.52	0.48	23.44	446.1	0.046
25	17.96[a]	32.79	5.33	0.45	20	18.75	32.80	5.36	0.46	23.42	447.7	0.090
49	15.74	32.77	6.10	0.47	30	18.35	32.78	5.38	0.46	23.51	439.8	0.135
73	12.54	32.75	6.51	0.50	50	15.50	32.77	6.17	0.47	24.17	377.6	0.216
97	11.07	32.86	6.18	0.59	75	12.45	32.75	6.50	0.51	24.78	319.8	0.304
146	9.26	33.10	5.17	1.26	100	10.95	32.88	6.15	0.61	25.16	284.1	0.379
194	8.05	33.58	4.21	1.81	150	9.12	33.13	5.09	1.32	25.66	236.9	0.509
291	6.86	33.82	2.96	2.30	200	7.96	33.60	4.12	1.85	26.20	185.8	0.614
388	5.78	33.86	1.81	2.82	250	7.33	33.75	3.47	2.10	26.41	166.5	0.703
508	5.07	33.96	0.82	3.18	300	6.75	33.83	2.85	2.36	26.55	153.5	0.783
815	4.06	34.25	0.35	3.36	400	5.69	33.86	1.70	2.87	26.71	138.9	0.929
1173	3.18	34.31	0.68	3.29	500	5.12	33.94	0.86	3.16	26.85	127.1	1.062
					600	4.73	34.09	0.56	3.29	27.01	112.4	1.182
					700	4.40	34.18	0.40	3.34	27.11	102.7	1.289
					800	4.10	34.24	0.35	3.36	27.20	95.6	1.388
					1000	3.55	34.30	0.46	3.34	27.30	86.7	1.571

a) Left thermometer reading of 18.73° rejected.

E See footnote page 208.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

HORIZON; September 6, 1949; 0214 GCT; 38°50'N, 124°05'W; sounding, missing; wind, 120°, force 1; weather, cloudy; sea, moderate; wire angle, 9°. 501

0	15.0	33.42E	5.78	0.94	0	15.0	33.42	5.78	0.94	24.78	318.4	0.000
10	14.65	33.42	5.85	0.94	10	14.65	33.42	5.85	0.94	24.85	311.5	0.032
25	13.40	33.40	5.99	1.07	20	13.95	33.40	5.96	1.02	24.98	299.3	0.062
49	10.66	33.41	5.49	1.43	30	12.45	33.40	5.97	1.15	25.28	270.9	0.091
73	9.27	33.57	4.12	1.81	50	10.55	33.41	5.55	1.44	25.64	237.3	0.141
97	8.84	33.73	3.49	2.01	75	9.20	33.59	4.06	1.84	26.00	202.9	0.196
145	8.14	33.96	2.34	2.24	100	8.78	33.75	3.44	2.03	26.20	185.0	0.245
193	7.57	34.02	2.03	2.31	150	8.08	33.97	2.29	2.25	26.47	159.4	0.331
291	6.75	34.09	1.49	2.59	200	7.50	34.03	2.00	2.32	26.61	147.3	0.408
389	6.08	34.17	0.90	2.84	250	7.07	34.06	1.80	2.45	26.69	140.0	0.479
585	5.03	34.29	0.53	3.05	300	6.69	34.10	1.41	2.62	26.77	132.6	0.548
879	4.21	34.42	-	3.11	400	6.00	34.18	0.85	2.86	26.93	119.1	0.673
1173	3.40	34.50	0.64	3.07	500	5.41	34.24	0.60	2.99	27.05	108.6	0.788
					600	4.99	34.30	0.54	3.06	27.15	100.0	0.892
					700	4.70	34.35	0.55	3.09	27.22	93.7	0.989
					800	4.41	34.39	0.55	3.11	27.28	88.2	1.080
					1000	3.87	34.46	0.60	3.10	27.39	78.7	1.246

HORIZON; September 6, 1949; 1058, 0855 GCT; 38°39'N, 124°54'W; sounding, 1,968 fm; wind, calm; weather, overcast; sea, slight; wire angle, 9°, 12°. 502

0	16.2	33.08E	5.85	0.65	0	16.2	33.08	5.85	0.65	24.25	368.6	0.000
10	14.24	33.04	6.29	0.74	10	14.24	33.04	6.29	0.74	24.64	331.3	0.035
25	12.98	33.01	6.10	0.87	20	13.39	33.03	6.23	0.82	24.81	315.5	0.067
49	10.15	33.19	5.60	1.26	30	12.30	33.01	6.00	0.95	25.01	296.7	0.098
73	9.56	33.54	4.74	1.67	50	10.15	33.21	5.60	1.27	25.55	245.7	0.152
96	9.08	33.69	3.70	2.04	75	9.52	33.55	4.64	1.72	25.92	210.8	0.209
144	8.14	33.93	2.58	2.13	100	8.98	33.71	3.57	2.06	26.13	191.1	0.260
192	7.66	34.00	2.37	2.22	150	8.08	33.95	2.54	2.14	26.46	160.8	0.347
289	6.68	34.09	1.78	2.50	200	7.58	34.01	2.33	2.24	26.58	149.9	0.426
386	5.86	34.13	1.08	2.80	250	7.07	34.06	2.08	2.37	26.69	140.0	0.498
581	5.13	34.29	0.43	3.10	300	6.57	34.10	1.70	2.53	26.79	131.1	0.565
876	4.11	34.45	0.55	3.07	400	5.80	34.13	0.98	2.83	26.91	120.3	0.691
1173	3.35	34.53	0.67	3.04	500	5.40	34.22	0.54	3.03	27.03	109.9	0.806
					600	5.06	34.30	0.43	3.10	27.14	100.7	0.912
481u	5.68	34.25	0.48	2.95	700	4.69	34.36	0.47	3.09	27.23	92.8	1.009
285u	6.54r	34.05	1.72	2.50	800	4.35	34.41	0.51	3.08	27.30	86.0	1.098
437u	5.59r	34.20	0.80	2.85	1000	3.79	34.50	0.60	3.06	27.43	74.6	1.258
668u	4.66r	34.36	0.30	3.12	1200	(3.29)	(34.54)	-	-	(27.51)	(67.3)	(1.402)
1502u	3.11r	34.65	2.06	2.70	1500	(2.68)	(34.61)	-	-	(27.62)	(57.1)	(1.588)
2796u	1.71r	34.63	1.62	2.86	2000	(2.01)	(34.65)	-	-	(27.71)	(43.6)	(1.852)
					2500	(1.77)	(34.64)	-	-	(27.72)	(48.1)	(2.095)

E Evaporation of all salinity samples occurred on Cruise 4909 on stations 501 through 810. Estimated average corrections to values given here can be made by subtracting 0.038‰ from the value of S, 0.030 from σ_t and by adding 2.8 to $10^5\delta$ at all depths; to ΔD add 0.003 for each 100 meter depth increment.

SIO

CCOFI

4909

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
503	HORIZON; September 6, 1949; 1912 GCT; 38°28'N, 125°43'W; sounding, missing; wind, 160°, force 2; weather, rain; sea, moderate; wire angle, 11°.											
0	15.2	32.97E	5.95	0.86	0	15.2	32.97	5.95	0.86	24.39	355.4	0.000
10	13.33	33.24	5.96	1.02	10	13.33	33.24	5.96	1.02	24.99	298.4	0.033
24	12.11	33.35	5.89	1.22	20	12.40	33.33	5.92	1.17	25.24	275.1	0.061
48	10.74	33.40	4.66	1.48	30	11.75	33.36	5.80	1.29	25.38	261.2	0.088
73	9.17	33.44	4.08	1.70	50	10.64	33.41	4.58	1.50	25.62	238.8	0.138
97	8.51	33.69	3.42	2.05	75	9.13	33.45	4.02	1.74	25.91	212.2	0.195
146	8.01	33.78	2.42	2.21	100	8.47	33.71	3.35	2.06	26.21	183.5	0.244
196	7.68	33.96	1.98	2.37	150	8.00	33.79	2.40	2.22	26.35	171.5	0.333
294	6.83	34.05	1.39	2.80	200	7.64	33.97	1.95	2.39	26.54	153.7	0.415
392	5.96	34.29r	0.84	2.90	250	7.20	34.02	1.64	2.60	26.64	144.7	0.491
588	4.82	34.14r	0.52	3.13	300	6.78	(34.06)	1.34	2.82	(26.73)	(136.9)	(0.561)
883	4.18	34.40	0.54	3.14	400	5.90	(34.15)	0.80	2.91	(26.92)	(120.0)	(0.690)
1178	3.32	34.49	0.66	3.14	500	5.22	(34.23)	0.57	3.04	(27.06)	(106.8)	(0.803)
					600	4.78	(34.29)	0.52	3.13	(27.16)	(98.1)	(0.906)
					700	4.56	(34.33)	0.52	3.13	(27.22)	(93.3)	(1.002)
					800	4.38	(34.36)	0.53	3.14	(27.26)	(90.0)	(1.094)
					1000	3.83	34.45	0.55	3.13	27.39	78.9	(1.273)
504	HORIZON; September 7, 1949; 0207 GCT; 38°17'N, 126°32'W; sounding, missing; wind 140°, force 1; weather, overcast; sea, moderate; wire angle, 0°.											
0	17.0	33.19E	5.71	0.82	0	17.0	33.19	5.71	0.82	24.15	378.2	0.000
10	15.67	33.33	5.75	0.87	10	15.67	33.33	5.75	0.87	24.56	339.1	0.036
25	12.29	33.44	5.91	1.23	20	12.90	33.41	5.90	1.02	25.20	278.2	0.067
50	10.33	33.48	4.98	1.67	30	11.81	33.45	5.90	1.34	25.44	255.5	0.093
75	8.91	33.60	3.80	1.93	50	10.33	33.48	4.98	1.67	25.73	228.4	0.142
100	8.43	33.69	3.16	2.12	75	8.91	33.60	3.80	1.93	26.06	197.9	0.195
150	7.91	33.93	2.30	2.26	100	8.43	33.69	3.16	2.12	26.20	184.2	0.243
200	7.28	33.96	2.00	2.40	150	7.91	33.93	2.30	2.26	26.47	159.5	0.329
300	6.68	34.05	1.07	2.85	200	7.28	33.96	2.00	2.40	26.58	149.5	0.406
400	5.64	34.05	0.95	2.99	250	6.98	34.00	1.53	2.63	26.65	143.3	0.479
600	4.76	34.22	0.42	3.04	300	6.68	34.05	1.07	2.85	26.74	136.2	0.549
900	3.91	34.36	0.45	3.07	400	5.64	34.05	0.95	2.99	26.87	124.3	0.679
1200	3.20	34.40	0.84	3.07	500	5.14	34.11	0.62	3.01	26.98	114.8	0.798
					600	4.76	34.22	0.42	3.04	27.11	103.0	0.908
					700	4.45	34.29	0.43	3.06	27.20	95.2	1.007
					800	4.17	34.34	0.45	3.07	27.27	89.1	1.099
					1000	3.66	34.37	0.52	3.07	27.34	82.5	1.271
505	HORIZON; September 7, 1949; 0859 GCT; 38°06'N, 127°20'W; sounding, missing; wind, 160°, force 1; weather, overcast; sea, rough; wire angle, 26°.											
0	18.7	32.80E	5.52	0.47	0	18.7	32.80	5.52	0.47	23.44	445.9	0.000
9	18.21	32.81	5.80	0.46	10	18.20	32.81	5.81	0.46	23.57	433.5	0.044
22	17.23	32.98	5.86	0.45	20	17.35	32.98	5.87	0.45	23.91	401.8	0.086
44	16.05	32.97	5.79	0.53	30	16.70	32.98	5.87	0.46	24.06	387.6	0.125
66	12.51	33.02	6.10	0.92	50	15.80	32.98	5.81	0.58	24.26	368.5	0.201
86	10.35	32.95	5.84	1.12	75	11.20	33.01	6.06	1.02	25.21	278.3	0.282
126	8.84	33.31	4.68	1.54	100	9.58	32.96	5.42	1.26	25.45	255.8	0.348
165	7.88	33.66	3.71	1.93	150	8.20	33.56	4.03	1.79	26.13	191.6	0.460
242	7.18	33.97	2.47	2.38	200	7.52	33.87	2.99	2.18	26.48	159.5	0.548
320	6.25	34.00	1.94	2.60	250	7.08	33.98	2.40	2.41	26.63	146.1	0.624
479	5.16	34.13	0.84	2.97	300	6.50	34.00	2.08	2.55	26.72	137.4	0.696
834	4.00	34.34	0.42	3.27	400	5.57	34.06	1.27	2.80	26.89	122.7	0.825
1112	3.22	34.45	0.66	3.15	500	5.09	34.15	0.78	3.00	27.02	111.0	0.942
					600	4.75	34.22	0.54	3.13	27.11	102.9	1.049
					700	4.40	34.28	0.42	3.22	27.19	95.3	1.148
					800	4.10	34.33	0.40	3.26	27.27	88.9	1.241
					1000	3.50	34.41	0.52	3.21	27.39	77.9	1.407

E See footnote page 219.

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

HORIZON; September 7, 1949; 1459 GCT; 37°54'N, 128°10'W; sounding, missing; wind, missing, force 1; weather, cloudy; sea, moderate; wire angle, 0°. 506

0	18.8	33.04E	5.62	0.51	0	18.8	33.04	5.62	0.51	23.60	430.7	0.000
10	18.37	33.06	5.69	0.54	10	18.37	33.06	5.69	0.54	23.72	419.3	0.043
25	18.09	33.04	4.10r	0.56	20	18.18	33.05	5.84	0.56	23.76	416.0	0.084
50	13.44	33.01	6.23	0.84	30	17.90	33.03	5.98	0.59	23.81	411.1	0.126
75	12.14	33.04	6.05	1.04	50	13.44	33.01	6.23	0.84	24.79	318.8	0.199
100	10.78	33.10	5.86	1.28	75	12.14	33.04	6.05	1.04	25.06	292.7	0.275
150	9.05	33.53	4.32	1.86	100	10.78	33.10	5.86	1.28	25.36	264.7	0.345
199	8.19	33.89	2.62	2.31	150	9.05	33.53	4.32	1.86	25.98	206.4	0.462
298	7.04	34.04	2.08	2.58	200	8.19	33.89	2.60	2.32	26.40	167.7	0.556
397	5.94	34.05	1.39	2.81	250	7.56	34.01	2.31	2.47	26.58	150.3	0.635
595	4.86	34.36r	0.55	3.20	300	7.02	(34.04)	2.06	2.58	(26.68)	(141.6)	(0.709)
889	3.92	34.18r	0.42	3.38	400	5.93	(34.05)	1.35	2.82	(26.83)	(127.8)	(0.843)
1185	3.19	34.47	0.69	3.37	500	5.27	(34.14)	0.81	3.02	(26.98)	(114.1)	(0.964)
					600	4.85	(34.23)	0.54	3.21	(27.10)	(103.4)	(1.072)
					700	4.49	(34.29)	0.45	3.31	(27.19)	(95.6)	(1.177)
					800	4.17	(34.33)	0.42	3.36	(27.26)	(89.9)	(1.270)
					1000	3.63	(34.41)	0.48	3.38	(27.38)	(79.4)	(1.440)

HORIZON; September 7, 1949; 2054 GCT; 37°45'N, 128°59'W; sounding, missing; wind, 140°, force 2; weather, overcast; sea, moderate; wire angle, 14°. 507

0	18.9	33.01E	5.30	0.56	0	18.9	33.01	5.30	0.56	23.55	435.3	0.000
10	18.06	32.95	5.54	0.57	10	18.06	32.95	5.54	0.57	23.71	419.9	0.043
24	17.93	32.98	5.53	0.61	20	17.98	32.96	5.55	0.59	23.74	417.9	0.085
48	13.62	33.05	6.15	0.84	30	17.70	33.01	5.57	0.64	23.84	408.0	0.126
72	11.19	33.06	5.72	1.17	50	13.30	33.05	6.15	0.86	24.85	312.9	0.198
96	10.03	33.19	5.59	1.42	75	11.00	33.07	5.71	1.20	25.30	270.4	0.271
144	8.92	33.63	3.89	1.93	100	9.89	33.23	5.56	1.47	25.61	240.7	0.335
192	8.18	33.87	2.66	2.34	150	8.83	33.67	3.62	2.00	26.13	192.5	0.444
287	6.98	34.04	2.16	2.55	200	8.08	33.90	2.61	2.37	26.42	165.2	0.513
382	6.16	34.09	1.28	2.91	250	7.42	34.00	2.38	2.47	26.60	149.1	0.611
573	5.04	34.19	0.63	3.24	300	6.84	34.05	2.06	2.58	26.71	138.4	0.683
860	4.06	34.36	0.39	3.38	400	6.04	34.10	1.19	2.96	26.86	125.5	0.814
1150	3.23	34.51	0.62	3.35	500	5.43	34.14	0.83	3.14	26.96	116.0	0.936
					600	4.94	34.21	0.56	3.27	27.08	106.0	1.047
					700	4.58	34.27	0.42	3.34	27.17	98.2	1.148
					800	4.25	34.33	0.38	3.37	27.25	90.8	1.244
					1000	3.63	34.43	0.46	3.37	27.39	78.0	1.412

HORIZON; September 8, 1949; 0242 GCT; 37°34'N, 129°47'W; sounding, missing; wind, missing, force 2; weather, cloudy; sea, moderate; wire angle, 15°. 508

0	18.8	32.92E	5.30	0.54	0	18.8	32.92	5.30	0.54	23.51	439.4	0.000
10	18.64	32.94	5.37	0.54	10	18.64	32.94	5.37	0.54	23.57	433.9	0.044
24	18.20	32.97	5.41	0.56	20	18.30	32.97	5.41	0.56	23.67	424.5	0.087
48	14.66	32.95	6.04	0.64	30	17.95	32.97	5.44	0.58	23.75	416.6	0.129
72	11.07	32.90	6.08	1.03	50	13.85	32.94	6.06	0.67	24.65	331.6	0.203
96	9.83	33.01	5.72	1.23	75	10.90	32.90	6.06	1.07	25.18	281.2	0.280
145	8.44	33.47	4.44	1.71	100	9.70	33.06	5.62	1.27	25.51	250.3	0.346
193	-	33.78	3.26	2.14	150	8.36	33.50	4.30	1.76	26.07	198.1	0.458
290	6.68	33.98	2.46	2.43	200	7.64	33.81	3.15	2.19	26.41	165.7	0.550
386	5.65	34.00	1.52	2.79	250	7.08	33.95	2.70	2.35	26.60	148.3	0.628
587	4.63[a]	34.11	1.04	-	300	6.56	33.98	2.39	2.46	26.70	139.7	0.700
827	3.81	34.33	0.70	-	400	5.56	34.00	1.46	(2.84)	26.84	126.8	0.833
1157	3.41	34.52	0.39	3.23	500	4.98	34.10	1.21	(3.06)	26.99	113.5	0.953
					600	4.55	34.13	1.02	(3.18)	27.06	107.3	1.064
					700	4.15	34.23	0.85	(3.24)	27.18	96.0	1.165
					800	3.87	34.31	0.73	(3.27)	27.27	88.0	1.257
					1000	3.55	34.43	0.53	(3.27)	27.40	77.0	1.423

a) Left thermometer reading of 5.09° rejected.

E See footnote page 219.

S10

CCOFI
4909

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
509	HORIZON; September 8, 1949;0907 GCT; 37°21'N, 130°36'W; sounding, missing; wind, 250°, force 3; weather, cloudy; sea, moderate; wire angle, 32°.											
0	19.8	33.14E	4.02	0.55	0	19.8	33.14	4.02	0.55	23.42	447.7	0.000
8	19.34	33.14	4.10	0.55	10	19.34	33.14	4.12	0.55	23.54	436.8	0.044
21	19.31	33.17	4.70	0.59	20	19.30	33.16	4.70	0.59	23.56	434.7	0.088
42	16.49	33.34	4.20	0.53	30	19.24	33.22	4.62	0.57	23.62	429.3	0.131
63	12.87	33.11	5.05	0.60	50	14.55	33.24	4.30	0.55	24.73	323.7	0.206
84	11.85	33.09	4.72	0.66	75	12.27	33.09	4.89	0.64	25.08	291.1	0.283
124	10.14	33.08	4.11	0.99	100	11.09	33.08	4.48	0.76	25.29	271.8	0.354
162	9.06	33.49	4.11	1.44	150	9.36	33.18	4.10	1.28	25.66	236.9	0.480
239	7.68	33.94	3.27	2.04	200	8.35	33.82	3.91	1.79	26.32	175.1	0.584
315	6.65	34.02	2.13	2.55	250	7.51	33.96	2.96	2.10	26.55	153.5	0.666
466	5.30	34.11	1.15	3.07	300	6.84	34.02	2.26	2.44	26.69	140.6	0.739
706	4.43	34.31	0.41	3.37	400	5.77	34.05	1.52	2.92	26.85	125.8	0.872
966	3.66	34.45	0.37	3.35	500	5.16	34.15	0.97	3.13	27.01	111.9	0.991
					600	4.79	34.25	0.57	3.28	27.13	101.3	1.098
					700	4.45	34.31	0.41	3.37	27.21	93.5	1.195
					800	4.13	34.36	0.40	3.38	27.29	87.0	1.285
					1000	(3.57)	(34.46)	-	-	(27.42)	(75.1)	(1.448)
510	HORIZON; September 8, 1949; 1702, 1457 GCT; 37°05'N, 131°28'W; sounding, missing; wind, missing; force 2, 3; weather, cloudy, squally; sea, rough; wire angle, 22°, 29°.											
0	20.2	33.24E	5.24	0.58	0	20.2	33.24	5.24	0.58	23.39	450.5	0.000
9	20.11	33.22	5.16	0.58	10	20.11	33.22	5.16	0.58	23.40	450.0	0.045
23	20.06	33.22	5.22	0.61	20	20.08	33.22	5.20	0.61	23.41	449.6	0.090
46	14.46	33.01	6.30	0.62	30	20.00	33.20	6.00	0.61	23.41	449.4	0.135
69	12.82	33.19	6.26	0.62	50	14.00	33.01	6.30	0.62	24.67	329.5	0.213
92	11.86	33.17	5.64	0.75	75	12.54	33.18	6.13	0.63	25.09	289.7	0.290
139	10.01	33.30	5.42	1.05	100	11.66	33.17	5.57	0.80	25.25	275.0	0.361
185	8.65	33.75	4.82	1.44	150	9.60	33.48	5.32	1.12	25.85	218.6	0.484
278	7.39	33.97	4.14	1.80	200	8.40	33.81	4.68	1.51	26.30	176.7	0.583
372	5.96	34.02	2.74	2.36	250	7.76	33.93	4.36	1.69	26.49	159.2	0.667
560	4.92	34.13	0.80	3.01	300	7.05	33.99	3.90	1.90	26.64	145.7	0.743
844	3.87	34.38	0.43	3.14	400	5.75	34.03	2.28	2.51	26.84	127.1	0.879
1134	3.21	34.49	0.51	3.14	500	5.19	34.07	1.15	2.89	26.94	118.3	1.002
					600	4.71	34.18	0.68	3.06	27.08	105.5	1.114
884	3.73	34.40	0.48	3.29	700	4.30	34.30	0.52	3.11	27.22	92.7	1.213
1068	3.26	34.49	0.48	3.23	800	3.99	34.36	0.44	3.14	27.30	85.5	1.302
1353	2.74	34.54	0.84	3.16	1000	3.49	34.43	0.45	3.14	27.41	76.3	1.464
1833	2.10	34.62	1.61	3.02	1200	3.03	34.50	-	-	27.51	67.2	1.608
2317	1.79	34.68	2.14	2.99	1500	2.51	34.56	-	-	27.60	58.8	1.796
2807	1.65	34.68	2.61	2.94	2000	1.96	34.65	-	-	27.72	47.8	2.063
					2500	1.73	34.68	-	-	27.76	44.6	2.295

E See footnote page 219.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	
HORIZON; September 11, 1949; 1232 GCT; 37°18'N, 123°12'W; sounding, missing; wind, 300°, force 4; weather, clear; sea, rough; wire angle, 42°.													601
0	16.0	33.25E	5.80	0.43	0	16.0	33.25	5.80	0.43	24.42	352.2	0.000	
7	15.96	33.30	6.11	0.49	10	15.87	33.30	6.21	0.51	24.49	345.7	0.035	
18	12.97	33.37	6.46	0.92	20	12.48	33.41	6.45	1.00	25.28	270.5	0.066	
37	9.91	33.57	-	1.74	30	10.54	33.54	6.35	1.50	25.74	227.2	0.091	
53	9.23	33.60	-	2.11	50	9.28	33.60	4.90	2.07	26.00	202.9	0.134	
69	9.02	33.73	3.28	2.12	75	8.93	33.75	3.12	2.18	26.17	186.9	0.182	
104	8.57	33.87	2.70	2.21	100	8.61	33.85	2.66	2.21	26.30	174.9	0.228	
137	8.21	34.01	2.52	2.25	150	8.16	34.04	2.40	2.28	26.52	155.2	0.310	
209	7.88	34.13	1.47	2.60	200	7.94	34.12	1.56	2.56	26.61	146.8	0.386	
280	7.14	34.18	1.20	2.78	250	7.41	34.17	1.28	2.73	26.73	136.5	0.456	
423	6.36	34.18	0.66	3.00	300	7.03	34.18	1.14	2.81	26.79	131.4	0.524	
647	4.79	34.31	0.40	3.34	400	6.51	34.18	0.74	2.96	26.86	125.6	0.652	
1000	3.77	34.47	0.55	3.32	500	5.77	34.21	0.50	3.12	26.98	115.2	0.772	
					600	5.04	34.28	0.41	3.29	27.12	102.0	0.881	
					700	4.57	34.34	0.40	3.34	27.22	92.7	0.978	
					800	4.24	34.39	0.42	3.34	27.30	86.3	1.068	
					1000	3.77	34.47	0.55	3.32	27.41	76.7	1.231	
HORIZON; September 11, 1949; 0554 GCT; 37°03'N, 123°57'W; sounding, missing; wind, 300°, force 4; weather, clear; sea, moderate; wire angle, 36°.													602
0	17.4	33.44E	5.35	0.32	0	17.4	33.44	5.35	0.32	24.24	369.0	0.000	
8	16.97	33.32	5.41	0.37	10	16.82	33.32	5.44	0.37	24.29	364.9	0.037	
21	15.65	33.40	5.95	0.35	20	15.84	33.40	5.95	0.35	24.58	338.1	0.072	
40	12.66	33.40	5.41	1.00	30	13.90	33.40	5.85	0.61	24.99	298.4	0.104	
61	9.84	33.49	4.20	1.67	50	10.75	33.41	4.90	1.39	25.60	240.6	0.158	
81	9.18	33.66	3.62	1.97	75	9.38	33.61	3.80	1.91	25.99	204.2	0.213	
120	8.32	33.93	2.38	2.15	100	8.73	33.80	2.77	2.08	26.24	180.5	0.261	
158	7.77	33.98	2.28	2.24	150	7.86	33.97	2.28	2.22	26.51	156.0	0.345	
232	7.02	34.04	1.56	2.47	200	7.34	34.03	1.94	2.36	26.63	145.1	0.421	
307	5.91	34.09	1.66	2.63	250	6.73	34.02	1.55	2.51	26.71	138.3	0.491	
460	5.48	34.20	0.59	2.98	300	5.97	34.00	1.66	2.61	26.79	130.8	0.558	
700	4.54	34.34	0.37	3.20	400	5.64	34.12	0.98	2.85	26.92	119.1	0.683	
1071	3.48	34.51	0.80	3.16	500	5.29	34.23	0.51	3.05	27.05	107.6	0.797	
					600	4.89	34.29	0.40	3.16	27.15	99.5	0.901	
					700	4.54	34.34	0.37	3.20	27.23	92.4	0.997	
					800	4.21	34.39	0.42	3.20	27.30	86.0	1.086	
					1000	3.64	34.48	0.69	3.17	27.43	74.4	1.246	
HORIZON; September 11, 1949; 0003 GCT; 36°48'N, 124°42'W; sounding, missing; wind, 320°, force 3; weather, partly cloudy; sea, moderate; wire angle, 19°.													603
0	17.9	33.46E	5.64	0.44	0	17.9	33.46	5.64	0.44	24.14	379.0	0.000	
10	16.65	33.35	5.72	0.50	10	16.65	33.35	5.72	0.50	24.35	359.1	0.037	
24	13.50	33.33	5.82	0.84	20	14.70	33.33	5.80	0.70	24.77	319.4	0.071	
47	10.20	33.51	4.70	1.52	30	11.80	33.34	5.81	1.01	25.36	263.5	0.100	
70	9.24	33.58	3.69	1.85	50	9.99	33.52	4.55	1.57	25.82	220.0	0.148	
94	8.80	33.68	3.27	1.97	75	9.12	33.60	3.62	1.89	26.03	200.9	0.201	
140	7.99	33.89	2.85	2.07	100	8.68	33.72	3.23	2.00	26.19	185.7	0.249	
187	7.64	33.98	2.25	2.26	150	7.90	33.91	2.75	2.09	26.46	161.0	0.336	
279	6.89	34.05	1.68	2.57	200	7.53	34.00	2.14	2.31	26.58	149.9	0.414	
372	6.16	34.05	1.00	2.78	250	7.12	34.04	1.86	2.50	26.67	142.2	0.487	
559	5.18	34.27	0.45	3.09	300	6.68	34.05	1.53	2.62	26.74	136.1	0.556	
844	4.10	34.40	0.48	3.17	400	5.97	34.06	0.82	2.84	26.84	127.6	0.688	
1135	3.30	34.51	0.78	3.14	500	5.44	34.18	0.49	3.02	27.00	113.3	0.808	
					600	4.99	34.31	0.45	3.12	27.15	99.2	0.915	
					700	4.58	34.35	0.45	3.15	27.23	92.2	1.011	
					800	4.24	34.38	0.46	3.16	27.29	87.1	1.101	
					1000	3.65	34.46	0.60	3.16	27.42	75.8	1.263	

E See footnote page 219.

SIO

CCOFI
4909

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

604 HORIZON; September 10, 1949; 1821 GCT; 36°37'N, 125°30'W; sounding, missing; wind, 320°, force 4; weather, partly cloudy; sea, moderate; wire angle, 30°.

0	18.9	33.26E	5.25	0.48	0	18.9	33.26	5.25	0.48	23.74	416.9	0.000
9	18.55	33.17	5.50	0.47	10	18.54	33.17	5.51	0.47	23.76	415.6	0.042
22	18.30	33.22	5.61	0.51	20	18.33	33.21	5.62	0.51	23.85	407.6	0.083
43	18.09	33.24	5.34	0.49	30	18.21	33.23	5.57	0.51	23.89	403.9	0.123
65	13.15	33.04	6.36	0.52	50	17.97	33.22	5.38	0.50	23.94	399.7	0.204
84	12.05	33.08	6.16	0.54	75	12.50	33.05	6.30	0.53	25.00	298.5	0.291
122	10.67	33.15	5.44	0.98	100	11.39	33.12	5.90	0.60	25.26	273.9	0.363
161	8.75	33.51	4.50	1.64	150	9.01	33.30	4.23	1.51	25.81	222.8	0.486
244	7.89	33.96	2.60	2.28	200	8.37	33.81	3.40	2.01	26.31	176.1	0.587
326	6.83	34.05	1.87	2.63	250	7.80	33.97	2.54	2.32	26.52	156.9	0.670
495	5.45	34.11	0.79	3.08	300	7.13	34.03	2.07	2.53	26.66	143.8	0.744
756	4.50	34.33	0.08	3.39	400	6.12	34.08	1.35	2.86	26.83	129.9	0.881
1034	3.70	34.45	0.65	3.35	500	5.44	34.11	0.77	3.09	26.94	118.6	1.005
					600	5.03	34.19	0.34	3.28	27.05	108.5	1.119
					700	4.68	34.29	0.12	3.37	27.17	97.8	1.222
					800	4.36	34.36	0.11	3.38	27.26	89.8	1.316
					1000	3.78	34.44	0.58	3.36	27.39	78.9	1.485

605 HORIZON; September 10, 1949; 1247 GCT; 36°24'N, 126°18'W; sounding, missing; wind, 320°, force 3; weather, cloudy; sea, moderate; wire angle, 22°.

0	18.8	33.13E	5.51	0.53	0	18.8	33.13	5.51	0.53	23.67	424.2	0.000
9	18.42	33.15	5.44	0.51	10	18.37	33.16	5.45	0.51	23.80	412.0	0.042
23	18.21	33.17	5.73	0.58	20	18.24	33.17	5.60	0.57	23.83	408.6	0.083
46	17.79	33.10	5.60	0.54	30	18.11	33.16	5.83	0.57	23.86	406.7	0.124
69	15.29	33.10	6.21	0.56	50	17.67	33.10	6.08	0.54	23.92	401.4	0.204
92	12.19	33.01	6.23	0.72	75	14.10	33.07	6.22	0.59	24.70	327.7	0.296
136	9.76	33.17	5.42	1.22	100	11.51	33.01	6.18	0.80	25.16	284.2	0.372
181	8.46	33.55	3.81	1.86	150	9.23	33.33	5.00	1.42	25.80	223.9	0.499
270	7.56	33.96	2.26	2.31	200	8.24	33.66	3.10	2.04	26.21	185.5	0.602
359	6.24	33.98	2.18	2.53	250	7.79	33.91	2.32	2.26	26.47	161.1	0.688
538	5.32	34.13	0.64	3.04	300	7.01	33.97	2.24	2.39	26.63	146.8	0.765
812	4.40	34.38	0.44	3.19	400	5.95	34.00	2.04	2.65	26.79	131.7	0.904
1099	3.59	34.47	0.65	3.18	500	5.42	34.09	0.87	2.97	26.93	119.7	1.030
					600	5.11	34.20	0.54	3.12	27.05	108.8	1.144
					700	4.77	34.29	0.47	3.16	27.16	99.0	1.248
					800	4.43	34.37	0.45	3.18	27.26	89.9	1.343
					1000	3.86	34.45	0.55	3.19	27.39	79.1	1.512

606 HORIZON; September 10, 1949; 0644 GCT; 36°10'N, 127°02'W; sounding, missing; wind, 320°, force 3; weather, partly cloudy; sea, moderate; wire angle, 12°.

0	19.5	33.13E	4.77	0.52	0	19.5	33.13	4.77	0.52	23.49	441.1	0.000
10	19.14	33.03	5.34	0.50	10	19.14	33.03	5.34	0.50	23.50	440.1	0.044
25	18.87	33.08	5.40	0.56	20	18.93	33.08	5.40	0.54	23.60	431.4	0.088
49	15.34	32.88	5.84	0.56	30	18.76	33.07	5.44	0.56	23.63	428.4	0.131
73	11.99	32.88	6.10	0.59	50	15.34	32.88	5.85	0.56	24.29	366.3	0.210
97	10.76	32.94	6.11	0.72	75	11.93	32.89	6.11	0.60	24.99	299.7	0.293
145	9.03	33.10	5.02	1.41	100	10.58	32.95	6.08	0.73	25.28	272.6	0.365
193	8.18	33.69	3.46	1.95	150	8.91	33.14	4.74	1.48	25.70	233.2	0.491
290	7.08	34.02	2.27	2.37	200	8.08	33.74	3.33	1.99	26.29	177.1	0.594
388	6.06	34.04	1.36	2.80	250	7.50	33.94	2.71	2.19	26.54	154.8	0.677
582	5.13	34.38r	0.55	3.09	300	6.97	34.02	2.19	2.42	26.67	142.5	0.751
874	4.03	34.42	0.37	3.23	400	5.98	(34.04)	1.26	2.84	(26.82)	(129.1)	(0.887)
1166	3.25	34.52	0.79	3.10	500	5.48	(34.10)	0.76	3.02	(26.93)	(119.7)	(1.011)
					600	5.05	(34.20)	0.50	3.10	(27.06)	(108.0)	(1.125)
					700	4.64	(34.29)	0.40	3.17	(27.18)	(97.4)	(1.228)
					800	4.28	(34.37)	0.37	3.22	(27.28)	(88.1)	(1.321)
					1000	3.65	34.47	0.46	3.19	27.42	75.3	(1.484)

E See footnote page 219.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

HORIZON; September 10, 1949; 0050 GCT; 35°58'N, 127°51'W; sounding, missing; wind, missing; force 3; weather, clear; sea, moderate; wire angle, 23°. 607

0	19.9	33.06E	5.38	0.50	0	19.9	33.06	5.38	0.50	23.33	455.8	0.000
10	19.42	32.97	5.43	0.52	10	19.42	32.97	5.43	0.52	23.39	450.9	0.045
23	19.21	32.99	5.33	0.55	20	19.24	32.99	5.33	0.55	23.45	445.6	0.090
46	15.45	32.99	6.10	0.52	30	19.02	32.99	5.34	0.54	23.51	440.2	0.135
68	11.16	32.86	6.24	0.65	50	14.00	32.98	6.15	0.53	24.65	331.7	0.212
90	9.94	32.77	6.15	0.86	75	10.69	32.83	6.24	0.71	25.16	283.0	0.288
132	9.11	33.21	5.10	1.36	100	9.66	32.77	6.00	0.98	25.29	271.2	0.358
175	8.32	33.68	3.84	1.86	150	8.72	33.52	4.46	1.58	26.03	202.0	0.476
261	7.25	33.95	2.62	2.33	200	8.01	33.77	3.46	2.04	26.33	174.1	0.570
349	6.27	34.11	1.58	2.67	250	7.41	33.93	2.75	2.29	26.54	154.2	0.652
526	5.04	34.13	0.66	3.03	300	6.81	34.04	2.11	2.47	26.71	139.0	0.725
798	4.17	34.38	0.39	3.21	400	5.79	34.12	1.17	2.85	26.91	120.9	0.855
1079	3.39	34.45	0.61	3.18	500	5.17	34.12	0.74	3.01	26.98	114.4	0.973
					600	4.79	34.20	0.54	3.10	27.09	104.9	1.082
					700	4.46	34.30	0.42	3.17	27.20	94.5	1.187
					800	4.15	34.38	0.39	3.21	27.30	85.9	1.277
					1000	3.59	34.44	0.52	3.20	27.41	76.7	1.440

HORIZON; September 9, 1949; 1814 GCT; 35°43'N, 128°35'W; sounding, missing; wind, 320°, force 3; weather, cloudy; sea, rough; wire angle, 14°. 608

0	20.0	33.21E	3.54	0.54	0	20.0	33.21	3.54	0.54	23.42	447.5	0.000
10	19.59	33.08	3.95	0.55	10	19.59	33.08	3.95	0.55	23.43	447.3	0.045
24	18.97	33.22	4.02	0.57	20	19.10	33.22	4.02	0.56	23.66	425.4	0.088
48	16.05	32.97	4.35	0.58	30	18.69	33.16	4.09	0.57	23.72	420.3	0.131
72	11.34	32.79	4.52	0.69	50	15.74	32.94	4.40	0.58	24.24	370.2	0.210
96	10.13	32.77	4.45	0.91	75	11.10	32.79	4.53	0.71	25.06	292.9	0.293
145	8.93	33.39	3.93	1.54	100	10.00	32.77	4.43	0.97	25.23	276.6	0.364
194	8.10	33.80	2.60	2.11	150	8.84	33.45	3.82	1.60	25.95	209.0	0.485
291	6.90	33.95	2.00	2.43	200	8.01	33.82	2.53	2.14	26.37	170.3	0.580
388	6.04	34.02	1.09	2.84	250	7.37	33.91	2.21	2.32	26.53	155.2	0.661
582	4.82	34.20	0.50	3.13	300	6.81	33.96	1.94	2.46	26.65	144.8	0.736
874	4.01	34.36	0.41	3.21	400	5.94	34.03	1.00	2.88	26.81	129.5	0.873
1165	3.25	34.47	0.71	3.32	500	5.25	34.13	0.60	3.06	26.98	114.7	0.995
					600	4.76	34.21	0.49	3.14	27.10	103.8	1.105
					700	4.49	34.27	0.44	3.16	27.18	97.1	1.205
					800	4.24	34.32	0.41	3.18	27.24	91.5	1.299
					1000	3.68	34.41	0.51	3.26	27.37	80.0	1.471

HORIZON; September 9, 1949; 1116 GCT; 35°30'N, 129°24'W; sounding, missing; wind, missing, force 3; weather, cloudy; sea, moderate; wire angle, 14°. 609

0	20.0	33.13E	5.35	0.54	0	20.0	33.13	5.35	0.54	23.36	453.6	0.000
10	19.62	33.13	5.40	0.55	10	19.62	33.13	5.40	0.55	23.46	444.5	0.045
25	18.46	33.26	5.62	0.50	20	18.99	33.26	5.57	0.51	23.72	419.8	0.088
48	14.34	33.19	6.14	0.54	30	17.90	33.25	5.79	0.51	23.98	395.2	0.129
73	12.97	33.22	6.19	0.51	50	14.15	33.19	6.15	0.54	24.78	319.3	0.200
96	12.14	33.22	6.02	0.59	75	12.87	33.22	6.19	0.52	25.06	292.8	0.277
143	10.19	33.34	5.24	0.97	100	11.99	33.23	5.98	0.61	25.24	276.5	0.348
190	8.45	33.66	4.52	1.61	150	9.77	33.37	5.11	1.09	25.74	229.3	0.474
284	7.38	33.95	3.62	1.92	200	8.30	33.72	4.40	1.68	26.25	181.8	0.578
378	6.08	34.00	2.18	2.53	250	7.74	33.90	3.95	1.86	26.47	161.2	0.663
569	4.72	34.14	0.73	3.13	300	7.15	33.96	3.40	1.96	26.60	149.2	0.740
857	3.95	34.38	0.36	3.22	400	5.84	34.01	1.91	2.67	26.81	129.7	0.880
1152	3.23	34.50	0.68	3.22	500	5.04	34.07	1.07	3.00	26.96	116.5	1.003
					600	4.63	34.17	0.63	3.16	27.08	105.3	1.114
					700	4.37	34.26	0.43	3.21	27.18	96.5	1.215
					800	4.10	34.34	0.35	3.22	27.27	88.2	1.307
					1000	3.60	34.46	0.43	3.24	27.42	75.3	1.470

E See footnote page 219.

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

610 HORIZON; September 9, 1949; 0557 GCT; 35°18'N, 130°12'W; sounding, missing; wind, 310°, force 4; weather, partly cloudy; sea, rough; wire angle, 27°.

0	20.3	33.21E	5.31	0.49	0	20.3	33.21	5.31	0.49	23.34	455.2	0.000
9	19.99	33.17	5.09	0.52	10	19.99	33.17	5.05	0.52	23.39	450.7	0.045
22	19.47	33.19	4.41	0.53	20	19.54	33.18	4.45	0.53	23.52	439.1	0.090
44	16.76	33.30	5.80	0.49	30	18.70	33.23	4.44	0.52	23.77	415.5	0.133
65	13.79	33.26	6.32	0.51	50	16.35	33.30	6.05	0.49	24.38	357.2	0.210
87	12.76	33.30	5.87	0.63	75	13.11	33.27	6.08	0.56	25.05	293.8	0.291
131	12.19	33.40	5.63	0.66	100	12.56	33.33	5.80	0.64	25.21	279.6	0.363
174	9.52	33.49	5.10	1.35	150	11.20	33.44	5.39	0.94	25.55	248.2	0.494
261	7.86	33.90	4.01	1.80	200	8.81	33.58	4.77	1.51	26.06	200.0	0.606
348	6.64	33.96	2.96	2.25	250	8.01	33.88	4.15	1.74	26.41	166.7	0.699
524	4.94	34.10	1.07	2.94	300	7.34	33.93	3.53	2.00	26.55	154.0	0.778
797	4.11	34.33	0.44	3.22	400	5.96	33.99	2.30	2.53	26.78	132.5	0.922
1084	3.32	34.47	0.61	3.27	500	5.07	34.07	1.25	2.89	26.95	116.8	1.047
					600	4.70	34.18	0.70	3.04	27.08	105.4	1.158
					700	4.39	34.27	0.50	3.14	27.19	95.9	1.258
					800	4.10	34.33	0.45	3.22	27.27	88.9	1.351
					1000	3.55	34.43	0.55	3.27	27.40	77.1	1.516

701 HORIZON; September 13, 1949; 0650, 0725 GCT; 35°41'N, 121°50'W; sounding, missing; wind, 300°, force 4; weather, partly cloudy; sea, moderate; wire angle, 50°, 65°.

0	15.7	33.19E	5.92	0.35	0	15.7	33.19	5.92	0.35	24.45	349.7	0.000
7	15.36	34.13r	5.90	0.40	10	15.30	33.21	5.92	0.42	24.55	340.3	0.035
16	15.21	33.21	6.40	0.44	20	14.90	33.16	6.34	0.48	24.60	335.8	0.068
33	12.38	33.01	5.75	0.61	30	13.25	33.04	5.90	0.57	24.85	312.2	0.101
47	10.31	32.81	5.50	0.72	50	10.20	32.81	5.45	0.76	25.23	275.9	0.160
60	9.96	32.97	5.26	0.92	75	10.74	33.64	4.30	1.46	25.78	224.2	0.222
82	10.82	33.66	3.99	1.59	100	9.15	33.53	3.83	1.76	25.97	207.0	0.276
104	9.07	33.53	3.80	1.79	150	8.78	33.70	3.29	1.95	26.16	189.6	0.375
164	8.66	33.77	3.10	1.99	200	8.02	33.94	2.43	2.20	26.46	161.4	0.463
					250	7.54	34.07	1.62	2.50	26.63	145.7	0.540
233	7.64	34.04	1.84	2.43	300	7.29	34.13	1.18	2.64	26.72	138.5	0.610
316	7.21	34.14	1.12	2.68	400	6.56	34.19	0.89	2.85	26.86	125.6	0.743
447	6.21	34.23	0.78	2.93	500	5.78	34.26	0.64	3.00	27.02	111.7	0.861
640	4.82	34.31	0.41	3.08	600	5.02	34.30	0.44	3.07	27.14	100.4	0.967

702 HORIZON; September 13, 1949; 1713, 1451 GCT; 35°24'N, 122°36'W; sounding, missing; wind, 320°, force 5; weather, cloudy, overcast; sea, very rough; wire angle, 36°, 46°.

0	17.0	33.15E	5.68	0.38	0	17.0	33.15	5.68	0.38	24.12	381.2	0.000
8	16.62	33.15	5.52	0.34	10	16.55	33.15	5.52	0.35	24.22	371.4	0.038
20	15.22	33.19	5.67	0.53	20	15.22	33.19	5.67	0.53	24.55	340.0	0.073
40	13.38	33.17	5.95	0.78	30	14.13	33.19	5.88	0.70	24.78	318.3	0.106
60	10.34	32.81	5.70	0.85	50	10.55	32.99	5.86	0.82	25.31	268.3	0.165
95	10.56	33.60	5.14	1.71	75	10.41	33.19	5.49	1.05	25.49	251.7	0.230
193	9.19	33.96	2.00	2.37	100	10.54	33.63	5.01	1.80	25.81	222.1	0.289
310	8.19	34.22	1.32	2.77	150	9.70	33.86	3.40	2.23	26.13	192.1	0.393
391	7.40	34.22	1.02	2.87	200	9.12	33.98	1.91	2.39	26.32	174.7	0.484
472	6.72	34.23	0.69	3.10	250	8.67	34.11	1.60	2.56	26.49	159.5	0.567
720	5.00	34.33	0.45	3.30	300	8.26	34.21	1.37	2.75	26.64	146.8	0.645
1072	3.77	34.42	0.60	3.30	400	7.30	34.22	0.99	2.89	26.79	133.6	0.785
1355	3.05	34.49	1.06	3.29	500	6.48	34.24	0.62	3.15	26.91	122.1	0.913
					600	5.71	34.28	0.49	3.25	27.04	110.6	1.029
1288	3.15	34.49	0.96	3.15	700	5.10	34.32	0.45	3.30	27.15	100.8	1.135
1472	2.75	34.51	1.12	3.02	800	4.65	34.36	0.45	3.30	27.23	93.3	1.232
1758	2.36	34.51	1.56	2.87	1000	3.99	34.41	0.56	3.30	27.34	83.5	1.409
2240	1.92	34.60	2.07	2.74	1200	3.39	34.47	0.78	3.25	27.45	73.4	1.565
2726	1.75	34.61	2.42	2.74	1500	2.71	34.51	1.15	3.00	27.54	64.8	1.774
3222	1.64	-	2.54	2.67	2000	2.11	34.54	1.92	2.78	27.62	57.9	2.080
					2500	1.81	34.61	2.28	2.74	27.70	50.7	2.352
					3000	1.68	(34.61)	2.49	2.72	(27.71)	(50.6)	(2.605)

E See footnote page 219.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

HORIZON; September 13, 1949; 2301 GCT; 35°18'N, 123°24'W; sounding, missing; wind, 320°, force 5; weather, cloudy; sea, rough; wire angle, 40°. 703

0	18.3	33.08E	5.25	0.30	0	18.3	33.08	5.25	0.30	23.75	415.9	0.000	
8	18.05	33.06	5.25	0.37	10	18.05	33.06	5.25	0.37	23.80	412.0	0.041	
19	18.01	33.06	5.25	0.34	20	18.00	33.06	5.25	0.34	23.81	411.1	0.083	
39	17.80	33.26	5.19	0.35	30	17.91	33.08	5.20	0.34	23.85	407.8	0.124	
58	14.65	33.06	5.84	0.42	50	17.28	33.16	5.70	0.39	24.06	388.2	0.203	
77	11.49	32.95	5.78	0.57	75	11.65	32.95	5.79	0.55	25.08	290.6	0.288	
116	10.07[a]	33.37	4.58	1.34	100	10.85	33.15	5.28	0.94	25.38	262.5	0.357	
153	9.16	33.68	3.46	1.92	150	9.20	33.66	3.53	1.89	26.06	199.1	0.472	
228	8.38	33.98	2.05	2.33	200	8.65	33.86	2.44	2.20	26.30	174.7	0.566	
302	7.68	34.16	1.45	2.62	250	8.18	34.07	1.84	2.42	26.54	155.0	0.648	
455	5.90	34.14	0.93	2.94	300	7.70	34.16	1.47	2.61	26.68	142.1	0.722	
696	4.90	34.27	0.43	3.32	400	6.42	34.15	1.08	2.85	26.85	126.8	0.856	
1068	3.72	34.40	0.71	3.29	500	5.63	34.15	0.82	3.03	26.95	118.0	0.979	
					600	5.23	34.20	0.56	3.24	27.04	110.4	1.093	
					700	4.88	34.27	0.45	3.32	27.13	101.9	1.199	
					800	4.54	34.32	0.48	3.32	27.21	95.0	1.298	
					1000	3.91	34.39	0.65	3.30	27.33	84.3	1.477	

HORIZON; September 14, 1949; 0442 GCT; 34°54'N, 124°06'W; sounding, missing; wind, 320°, force 4; weather, partly cloudy; sea, rough; wire angle, 20°. 704

0	18.4	33.33E	5.43	0.33	0	18.4	33.33	5.43	0.33	23.92	400.0	0.000	
9	18.28	33.24	5.38	0.34	10	18.30	33.24	5.38	0.34	23.87	404.5	0.040	
23	18.28	33.28	5.45	0.33	20	18.28	33.27	5.43	0.33	23.90	402.3	0.081	
46	17.01	33.30	5.75	0.38	30	18.23	33.29	5.53	0.33	23.93	399.9	0.121	
70	12.97	33.24	6.08	0.61	50	16.06	33.30	5.80	0.41	24.45	350.9	0.195	
93	10.77	33.51	4.92	1.37	75	12.40	33.24	6.06	0.76	25.17	282.9	0.274	
140	8.92[b]	33.68	3.43	1.82	100	10.42	33.57	4.60	1.49	25.78	244.4	0.340	
187	8.37	33.89	2.49	2.14	150	8.78	33.71	3.17	1.89	26.17	188.8	0.448	
282	7.20	34.00	1.93	2.44	200	8.20	33.92	2.40	2.21	26.42	165.5	0.537	
376	6.41	34.04	1.20	2.79	250	7.57	33.98	2.12	2.37	26.56	152.7	0.616	
565	5.23	34.22	0.61	3.09	300	7.03	34.01	1.80	2.49	26.66	144.0	0.691	
851	4.31	34.40	0.47	3.20	400	6.23	34.06	1.08	2.84	26.80	131.0	0.827	
1259	3.33	34.51	1.00	3.21	500	5.54	34.15	0.75	3.00	26.96	116.8	0.951	
					600	5.09	34.25	0.57	3.12	27.09	104.8	1.063	
					700	4.76	34.32	0.50	3.18	27.19	96.6	1.163	
					800	4.45	34.38	0.47	3.20	27.27	89.4	1.256	
					1000	3.92	34.45	0.61	3.20	27.38	80.0	1.426	

HORIZON; September 14, 1949; 1057 GCT; 34°24'N, 124°48'W; sounding, missing; wind, 320°, force 3; weather, cloudy; sea, rough; wire angle, 36°. 705

0	18.8	33.18E	5.48	0.30	0	18.8	33.18	5.48	0.30	23.70	420.5	0.000	
8	18.58	33.15	5.46	0.34	10	18.58	33.15	5.47	0.34	23.73	418.1	0.042	
20	18.56	33.15	4.12r	0.34	20	18.56	33.15	5.52	0.34	23.74	417.4	0.084	
40	16.97	33.15	5.77	0.35	30	18.15	33.15	5.63	0.34	23.84	408.3	0.125	
58	15.68	33.12	5.81	0.35	50	16.20	33.14	5.81	0.35	24.29	365.6	0.202	
76	12.44	32.97	5.69	0.43	75	13.00	32.97	5.71	0.42	24.84	313.7	0.287	
111	10.86	33.13	5.51	0.77	100	11.22	33.06	5.55	0.62	25.25	275.5	0.361	
145	9.46	33.42	4.79	1.26	150	9.33	33.46	4.65	1.34	25.88	216.0	0.483	
214	8.02	33.90	3.44	1.76	200	8.19	33.84	3.70	1.82	26.36	171.3	0.581	
286	7.27	33.98	2.06	2.48	250	7.62	33.97	2.63	2.25	26.54	154.3	0.662	
434	5.62	34.05	1.07	3.01	300	7.09	33.98	1.95	2.56	26.63	146.8	0.737	
670	4.68	34.23	0.44	3.28	400	5.90	34.02	1.28	2.94	26.81	129.6	0.875	
927	3.93	34.42	0.52	3.39	500	5.32	34.10	0.81	3.12	26.95	117.7	0.999	
					600	4.93	34.18	0.54	3.23	27.06	108.2	1.112	
					700	4.58	34.25	0.45	3.30	27.15	99.6	1.216	
					800	4.28	34.32	0.47	3.34	27.24	91.9	1.311	
					1000	(3.75)	(34.45)	-	-	(27.40)	(77.9)	(1.481)	

a) Middle thermometer reading of 10.68° rejected.
b) Middle thermometer reading of 10.47° rejected.
E See footnote page 219.

SIO

CCOFI
4909

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

706 HORIZON; September 14, 1949; 1652 GCT; 34°24'N, 125°32'W; sounding, missing; wind, 320°, force 3; weather, partly cloudy; sea, rough; wire angle, 7°.

0	19.1	33.19E	5.53	0.33	0	19.1	33.19	5.53	0.33	23.64	426.9	0.000
10	18.84	33.19	5.60	0.35	10	18.84	33.19	5.60	0.35	23.71	420.4	0.042
25	17.76	33.19	5.65	0.40	20	18.15	33.19	5.64	0.38	23.87	445.1	0.086
50	16.40	33.13	5.59	0.35	30	17.45	33.18	5.65	0.40	24.03	389.9	0.127
75	12.38	32.97	6.31	0.38	50	16.40	33.13	5.59	0.35	24.24	370.7	0.193
99	10.78	33.10	5.84	0.75	75	12.38	32.97	6.31	0.38	24.97	301.8	0.278
148	9.01	33.46	4.80	1.42	100	10.75	33.11	5.80	0.77	25.37	263.9	0.348
198	8.21	33.86	3.68	1.86	150	8.96	33.49	4.75	1.44	25.96	207.8	0.466
297	6.98	33.98	2.51	2.36	200	8.18	33.87	3.63	1.87	26.38	169.0	0.561
395	5.79	34.00	1.62	2.72	250	7.55	33.94	2.99	2.18	26.53	155.5	0.641
591	4.93	34.23	0.51	3.15	300	6.91	33.98	2.48	2.37	26.65	144.5	0.716
885	4.00	34.38	0.55	3.29	400	5.75	34.00	1.57	2.74	26.82	129.3	0.853
1180	3.29	34.49	0.25r	3.27	500	5.24	34.12	0.83	3.00	26.92	115.2	0.975
					600	4.90	34.24	0.51	3.16	27.11	103.4	1.084
					700	4.54	34.31	0.51	3.24	27.20	94.8	1.184
					800	4.25	34.35	0.52	3.28	27.27	89.3	1.276
					1000	3.71	34.43	-	3.29	27.38	78.9	1.445

707 HORIZON; September 14, 1949; 2214 GCT; 34°19'N, 126°18'W; sounding, missing; wind, 320°, force 2; weather, moderate rain shower; sea, rough; wire angle, 30°.

0	19.2	33.15E	5.50	0.37	0	19.2	33.15	5.50	0.37	23.58	432.4	0.000
8	18.46	33.08	5.65	0.36	10	18.40	33.08	5.67	0.36	23.73	418.5	0.043
21	17.98	33.15	5.74	0.37	20	18.00	33.15	5.75	0.37	23.88	404.6	0.084
42	17.33	33.15	5.72	0.43	30	17.70	33.15	5.74	0.39	23.95	397.9	0.124
62	16.18	33.26	5.99	0.52	50	16.98	33.16	5.79	0.46	24.13	381.5	0.202
82	13.31	33.26	6.45	0.56	75	14.30	33.26	6.40	0.55	24.80	317.9	0.289
122	9.94	33.28	5.08	1.33	100	11.35	33.27	6.07	0.72	25.39	262.1	0.362
162	8.54	33.66	3.42	2.09	150	8.80	33.38	3.75	1.95	25.90	213.7	0.480
242	8.16	33.96	2.48	2.43	200	8.36	33.86	2.89	2.29	26.35	172.2	0.578
323	6.58	34.05	1.90	2.82	250	8.00	33.97	2.41	2.47	26.49	159.7	0.660
489	5.04	34.14	0.89	3.27	300	6.99	34.02	2.04	2.72	26.67	142.7	0.735
751	4.25	34.42	0.45	3.50	400	5.57	34.10	1.37	3.06	26.92	119.6	0.867
1030	3.62	34.45	0.67	3.57	500	4.98	34.14	0.83	3.29	27.02	110.5	0.982
					600	4.65	34.27	0.58	3.41	27.16	98.1	1.086
					700	4.37	34.38	0.46	3.48	27.28	87.4	1.178
					800	4.14	34.44	0.46	3.52	27.35	81.5	1.263
					1000	3.67	34.45	0.64	3.56	27.41	76.9	1.422

708 HORIZON; September 15, 1949; 0355 GCT; 33°51'N, 127°03'W; sounding, missing; wind, 315°, force 2; weather, overcast; sea, rough; wire angle, 26°.

0	19.4	33.19E	5.50	0.35	0	19.4	33.19	5.50	0.35	23.56	434.4	0.000
9	19.09	33.24	5.56	0.34	10	19.05	33.24	5.56	0.34	23.69	422.5	0.043
22	18.27	33.15	5.68	0.40	20	18.39	33.15	5.66	0.39	23.78	413.6	0.085
45	16.84	33.19	5.94	0.36	30	17.75	33.17	5.76	0.40	23.95	397.6	0.125
66	14.64	33.15	6.30	0.33	50	16.48	33.19	6.04	0.35	24.27	368.1	0.202
87	12.64	33.12	5.77	0.42	75	13.73	33.13	6.20	0.35	24.82	315.9	0.287
128	10.96	33.26	5.54	0.86	100	11.95	33.14	5.67	0.52	25.17	283.1	0.362
170	9.28	33.44	4.48	1.50	150	10.06	33.34	5.03	1.25	25.67	236.3	0.492
256	8.02	34.00	2.79	1.67	200	8.76	33.76	3.66	1.58	26.21	185.7	0.598
342	7.03	34.04	2.05	2.52	250	8.09	33.99	2.85	1.66	26.49	159.6	0.688
516	5.34	34.11	0.84	3.04	300	7.49	34.03	2.37	2.07	26.61	148.7	0.761
784	4.18	34.36	0.47	3.27	400	6.36	34.05	1.59	2.78	26.78	133.4	0.902
1064	3.50	34.52	0.66	3.26	500	5.46	34.09	0.89	3.01	26.92	120.1	1.029
					600	4.90	34.19	0.62	3.14	27.07	107.0	1.142
					700	4.47	34.28	0.50	3.23	27.19	96.0	1.244
					800	4.12	34.37	0.47	3.27	27.30	86.4	1.335
					1000	3.62	34.50	0.60	3.27	27.45	72.7	1.494

E See footnote page 219.

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

HORIZON; September 15, 1949; 0954 GCT; 33°35'N, 127°47'W; sounding, missing; wind, 315°, force 2; weather, rain; sea, rough; wire angle, 15°. 709

0	20.0	33.24E	5.26	0.19	0	20.0	33.24	5.26	0.19	23.44	445.5	0.000
9	19.83	33.26	5.07	0.29	10	19.82	33.27	5.06	0.29	23.51	438.9	0.044
23	19.78	33.31	5.00	0.31	20	19.78	33.30	5.01	0.30	23.55	436.3	0.088
46	16.85	33.33	5.57	0.20	30	19.60	33.32	5.04	0.30	23.61	430.0	0.131
70	14.82	33.57	5.60	0.18	50	16.30	33.35	5.59	0.20	24.43	352.5	0.210
94	14.38	33.64	5.94	0.27	75	14.67	33.60	5.65	0.19	24.98	300.6	0.291
141	11.28	33.35	5.71	0.79	100	14.27	33.64	5.96	0.31	25.10	290.2	0.365
188	8.97	33.53	4.36	1.56	150	10.50	33.37	5.67	0.82	25.62	241.4	0.498
242p	8.30	33.75	5.15r	1.83r	200	8.76	33.61	4.05	1.70	26.09	196.8	0.607
444p	5.89[a]	33.96	1.45	2.80	250	8.20	33.76	3.22	2.06	26.29	178.2	0.701
808p	4.24	34.31	0.43	3.39	300	7.54	33.81	2.68	2.30	26.43	165.8	0.787
1101p	3.43	34.40	0.82	3.41	400	6.29	33.91	1.76	2.68	26.68	142.7	0.942
					500	5.54	34.04	1.16	2.95	26.87	125.0	1.076
					600	5.00	34.15	0.80	3.17	27.03	111.2	1.194
					700	4.60	34.24	0.54	3.33	27.14	100.6	1.299
					800	4.26	34.31	0.44	3.39	27.23	92.4	1.395
					1000	3.68	34.37	0.65	3.41	27.34	82.9	1.571

HORIZON; September 15, 1949; 1724, 1507 GCT; 33°19'N, 128°31'W; sounding, missing; wind, 315°, force 1; weather, rain showers, moderate rain showers; sea, moderate; wire angle, 21°, 32°. 710

0	19.4 r	33.64E	5.18	0.17	0	(20.50)	33.64	5.18	0.17	(23.62)	(429.0)	0.000
9	20.41	33.64	5.26	0.20	10	20.40	33.64	5.26	0.20	23.64	426.8	(0.043)
23	20.26	33.66	5.20	0.25	20	20.30	33.66	5.21	0.24	23.68	423.1	0.085
46	18.59	33.89	5.63	0.12	30	20.01	33.67	5.25	0.23	23.77	415.6	0.127
68	15.55	33.57	6.17	0.25	50	18.20	33.89	5.78	0.13	24.39	356.3	0.204
91	15.16	33.71	5.85	0.26	75	15.40	33.64	6.14	0.26	24.86	312.8	0.288
134	13.94	33.71	5.69	0.29	100	15.00	33.71	5.77	0.27	25.00	299.9	0.365
177	12.16	33.73	5.14	0.79	150	13.37	33.71	5.48	0.38	25.34	268.5	0.507
264	8.74	33.86	4.33	1.58	200	10.99	33.76	4.93	1.07	25.83	221.9	0.629
352	7.10	33.95	3.29	2.23	250	9.15	33.84	4.47	1.48	26.21	186.7	0.731
530	5.24	33.96	1.01	3.15	300	8.01	33.91	3.89	1.86	26.44	165.2	0.820
803	4.06	34.27	0.44	3.40	400	6.44	33.96	2.71	2.56	26.70	141.0	0.972
1088	3.38	34.38	0.63	3.37	500	5.44	33.96	1.28	3.07	26.82	129.5	1.107
					600	4.84	34.01	0.70	3.27	26.93	119.7	1.232
1086	3.37	34.40	0.69	3.18r	700	4.41	34.17	0.51	3.36	27.10	103.6	1.344
1275	2.97	34.43	0.98	3.12	800	4.06	34.27	0.45	3.40	27.22	92.9	1.442
1569	2.51	34.51	1.30	2.99	1000	3.55	34.36	0.55	3.39	27.34	82.3	1.617
2065	1.97	34.58	1.94	2.91	1200	3.11	34.42	0.87	3.23	27.44	74.1	1.774
2561	1.73	34.65	2.43	2.79	1500	2.59	34.49	1.23	3.01	27.54	64.8	1.982
3061	1.61	34.60	2.62	2.88	2000	2.02	34.57	1.86	2.92	27.65	54.5	2.280
					2500	1.75	34.64	2.38	2.79	27.73	47.8	2.536
					3000	1.62	34.61	2.60	2.87	27.71	50.0	2.781

a) Middle thermometer reading of 5.98° rejected.

E See footnote page 219.

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
801	HORIZON; September 18, 1949; 1620 GCT; 33°50'N, 120°40'W; sounding, missing; wind, missing; force 1; weather, fog; sea, rough; wire angle, 11°.											
0	16.4	33.51E	5.68		0	16.4	33.51	5.68		24.53	341.7	0.000
10	15.55r	33.51	5.66		10	16.30	33.51	5.66		24.55	339.7	0.034
25	16.21	33.51	5.76		20	16.25	33.51	5.75		24.56	339.0	0.068
49	13.24	33.48	5.49		30	16.08	33.51	5.76		24.60	335.7	0.102
73	10.55	33.42	4.50		50	13.00	33.47	5.46		25.23	276.4	0.163
97	9.56	33.68	3.36		75	10.40	33.42	4.50		25.67	234.5	0.227
143	8.46	33.95	2.73		100	9.46	33.74	3.30		26.08	196.2	0.281
190	7.90	33.96	2.38		150	8.37	33.95	2.69		26.42	164.9	0.371
286	6.83	34.02	1.51		200	7.79	33.96	2.31		26.51	156.6	0.451
381	6.28	34.11	0.81		250	7.19	33.99	1.90		26.62	146.7	0.527
572	5.54	-	0.33		300	6.74	34.04	1.39		26.72	137.8	0.598
858	4.36	34.40	0.61		400	6.20	34.12	0.74		26.85	126.1	0.730
1145	3.49	34.45	0.84		500	5.83	34.19	0.42		26.96	117.5	0.852
					600	5.39	34.25	0.33		27.06	108.6	0.965
					700	4.94	34.31	0.40		27.16	99.7	1.069
					800	4.55	34.36	0.54		27.24	92.1	1.165
					1000	3.90	34.44	0.74		27.37	80.5	1.337
802	HORIZON; September 18, 1949; 1032 GCT; 33°31'N, 121°24'W; sounding, missing; wind, 320°, force 2; weather, low fog; sea, very rough; wire angle, 0°.											
0	16.5	33.49E	5.75		0	16.5	33.49	5.75		24.49	345.2	0.000
10	16.34	33.49	5.78		10	16.34	33.49	5.78		24.53	342.4	0.034
25	16.16	33.51	5.58		20	16.20	33.51	5.68		24.58	337.8	0.068
50p	16.72r	33.49r	5.75r		30	16.10	33.51	5.60		24.60	336.1	0.102
48p	16.18r	33.51r	5.81r		50	15.57	33.50	5.77		24.71	325.7	0.168
67p	14.17	33.53	5.38		75	12.00	33.54	4.99		25.48	253.4	0.241
104p	10.10	33.60	3.54		100	10.40	33.59	3.73		25.80	222.6	0.300
141p	8.60	33.86	2.72		150	8.44	33.90	2.65		26.37	169.8	0.398
254p	7.44	34.04	2.02		200	7.87	33.98	2.32		26.52	156.2	0.480
363p	6.19	34.20	0.95		250	7.47	34.03	2.06		26.61	147.7	0.556
575p	5.43	34.31	0.42		300	6.88	34.10	1.65		26.75	135.2	0.626
872p	4.20	34.38	0.57		400	6.00	34.23	0.74		26.97	115.3	0.752
1165p	3.38	34.49	0.96		500	5.65	34.29	0.46		27.06	107.8	0.863
					600	5.34	34.32	0.42		27.12	102.8	0.968
					700	4.91	34.34	0.45		27.18	97.1	1.068
					800	4.47	34.36	0.52		27.25	91.0	1.162
					1000	3.80	34.42	0.71		27.37	80.6	1.334
803	HORIZON; September 18, 1949; 0443 GCT; 33°15'N, 122°09'W; sounding, missing; wind, 360°, force 3; weather, clear; sea, high; wire angle, 38°.											
0	15.2	33.15E	5.80		0	(16.00)	33.15	5.80		(24.35)	(359.3)	0.000
8	15.96	33.22	5.85		10	15.95	33.22	5.85		24.41	353.3	(0.036)
20	15.96	33.13	5.58		20	15.96	33.13	5.58		24.34	360.2	0.071
39	12.82	33.01	6.02		30	15.88	33.06	5.68		24.30	364.0	0.108
59	11.98	33.21	5.88		50	12.35	33.09	6.00		25.06	292.2	0.173
79	10.57	33.39	5.11		75	10.82	33.35	5.36		25.54	246.8	0.241
118	9.17	33.66	3.66		100	9.62	33.55	4.28		25.90	212.9	0.298
156	8.76	33.91	2.54		150	8.81	33.88	2.71		26.29	176.8	0.396
232	8.32	34.11	1.54		200	8.48	34.06	1.89		26.48	159.4	0.479
305	7.68	34.20	1.04		250	8.20	34.14	1.39		26.59	150.3	0.557
451	6.15	34.29	0.55		300	7.75	34.20	1.08		26.70	140.0	0.629
685	4.97	34.38	0.39		400	6.63	34.27	0.68		26.92	120.7	0.760
1057	3.75	34.49	0.74		500	5.83	34.31	0.50		27.05	108.6	0.874
					600	5.33	34.35	0.42		27.14	100.5	0.979
					700	4.92	34.39	0.39		27.22	93.4	1.076
					800	4.57	34.42	0.42		27.29	87.8	1.166
					1000	3.93	34.48	0.65		27.40	77.8	1.332

E See footnote page 219.

HORIZON; September 17, 1949; 2131 GCT; 32°56'N, 122°49'W; sounding, missing; wind, 350°, force 5; weather, partly cloudy; sea, high; wire angle, 38°. 804

OBSERVED Z m	T °C	S ‰	O_2 ml/L	PO_4-P µg at/L	INTERPOLATED Z m	T °C	S ‰	O_2 ml/L	PO_4-P µg at/L	COMPUTED σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m
0	18.9	33.33 E	5.42		0	18.9	33.33	5.42		23.79	412.1	0.000
8	18.48	33.33	5.35		10	18.46	33.33	5.33		23.90	401.7	0.041
20	18.40	33.33	5.29		20	18.40	33.33	5.29		23.92	400.8	0.081
40	18.40	33.31	5.48		30	18.40	33.33	5.35		23.92	400.9	0.121
59	16.43	33.22	5.71		50	18.28	33.24	5.64		23.88	405.3	0.202
77	13.47	33.31	5.90		75	13.67	33.30	5.90		24.96	302.5	0.290
116	11.09	33.33	5.49		100	11.95	33.33	5.75		25.32	268.3	0.361
153	9.29	33.60	4.49		150	9.43	33.56	4.60		25.94	210.1	0.481
227	7.99	33.95	3.45		200	8.32	33.88	3.88		26.37	170.3	0.576
301	7.24	34.05	1.89		250	7.75	33.99	2.78		26.54	158.7	0.658
451	5.87	34.20	0.95		300	7.25	34.05	1.90		26.66	143.8	0.733
691	4.89	34.38	0.36		400	6.21	34.15	1.20		26.88	124.1	0.867
1078	3.59	34.51	0.74		500	5.63	34.25	0.74		27.03	110.6	0.985
					600	5.25	34.33	0.45		27.14	101.0	1.091
					700	4.86	34.38	0.35		27.22	93.3	1.188
					800	4.50	34.42	0.36		27.30	87.0	1.278
					1000	3.84	34.48	0.59		27.41	76.7	1.442

HORIZON; September 17, 1949; 1440 GCT; 32°40'N, 123°30'W; sounding, missing; wind, 360°, force 5; weather, partly cloudy; sea, high; wire angle, 46°. 805

OBSERVED Z m	T °C	S ‰	O_2 ml/L	PO_4-P µg at/L	INTERPOLATED Z m	T °C	S ‰	O_2 ml/L	PO_4-P µg at/L	COMPUTED σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m
0	19.0	33.32 E	5.46		0	19.0	33.32	5.46		23.53	437.1	0.000
7	18.69	33.34	5.41		10	18.66	33.34	5.42		23.86	405.8	0.042
18	18.65	33.30	5.45		20	18.64	33.28	5.46		23.82	410.2	0.083
35	16.41	33.19	5.89		30	17.50	33.22	5.79		24.05	388.3	0.123
52	13.57	33.06	6.12		50	13.80	33.07	6.09		24.76	321.1	0.194
82	10.85	34.02[a]	5.76		75	11.35	33.13	5.92		25.28	272.0	0.268
152u	9.00[b]	34.00	3.21		100	10.10	33.60	5.01		25.86	216.9	0.329
250	8.11	33.19	-		150	9.04	34.00	3.22		26.35	171.4	0.426
326	6.82	34.07	2.24		200	8.55	34.01	2.82		26.44	164.0	0.570
408	6.40	34.27	0.72		250	8.11	34.02	2.64		26.51	157.9	0.590
682	4.67	34.40	0.39		300	7.20	34.03	2.47		26.65	144.6	0.666
1071	3.61	34.54	0.82		400	6.45	34.26	0.81		26.93	119.0	0.798
1366	2.97	34.61	1.14		500	5.68	34.33	0.44		27.08	105.3	0.910
					600	5.07	34.37	0.40		27.19	95.7	1.011
					700	4.60	34.40	0.43		27.27	88.8	1.103
					800	4.26	34.44	0.50		27.34	82.8	1.168
					1000	3.76	34.51	0.73		27.44	73.6	1.344

HORIZON; September 17, 1949; 0756 GCT; 32°22'N, 124°13'W; sounding, missing; wind, 350°, force 4; weather, partly cloudy; sea, high; wire angle, 45°. 806

OBSERVED Z m	T °C	S ‰	O_2 ml/L	PO_4-P µg at/L	INTERPOLATED Z m	T °C	S ‰	O_2 ml/L	PO_4-P µg at/L	COMPUTED σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m
0	19.0	33.31E	5.68		0	19.0	33.31	5.68		23.52	437.9	0.000
7	18.96	33.24	5.48		10	18.96	33.24	5.47		23.71	420.3	0.043
17	18.95	33.26	5.58		20	18.93	33.26	5.57		23.73	418.4	0.085
35	18.55	33.31	5.47		30	18.75	33.29	5.49		23.80	412.2	0.126
53	16.73	33.44	6.18		50	17.75	33.44	6.16		24.16	378.6	0.206
82	13.36	33.31	6.17		75	13.98	33.33	6.19		24.92	306.3	0.291
165	9.47	33.53	4.66		100	12.90	33.31	6.03		25.14	287.5	0.365
259	7.74	34.04	4.00		150	9.90	33.42	4.96		25.76	227.8	0.494
324	7.12	34.05	2.38		200	8.68	33.84	4.38		26.28	178.5	0.596
388	6.12	34.05	1.78		250	7.88	34.03	4.08		26.55	153.5	0.679
586	4.83	34.23	0.59		300	7.35	34.05	2.74		26.64	145.3	0.753
879	4.00	34.47	0.54		400	6.02	34.05	1.68		26.82	128.9	0.890
1129	3.42	34.52	0.88		500	5.28	34.10	0.88		26.95	117.2	1.013
					600	4.78	34.25	0.59		27.13	101.1	1.122
					700	4.45	34.37	0.55		27.26	89.2	1.218
					800	4.18	34.44	0.54		27.34	81.8	1.303
					1000	3.70	34.50	0.65		27.44	73.6	1.458

a) This value interchanged with one at 250 meters; possible mixing of sample bottles.

b) Middle thermometer reading of 8.03° rejected.

E See footnote page 219.

SIO

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4909

	OBSERVED					INTERPOLATED					COMPUTED		
	Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
	m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
807	HORIZON; September 17, 1949; 0152 GCT; 32°05'N, 124°55'W; sounding, missing; wind, 320°, force 4; weather, cloudy; sea, very rough; wire angle, 28°.												
	0	19.8	33.44E	5.41		0	19.8	33.44	5.41		23.65	426.0	0.000
	9	19.05r	33.45	6.19		10	19.34	33.45	6.18		23.77	414.3	0.042
	22	19.28	33.47	5.35		20	19.29	33.47	5.37		23.80	412.0	0.083
	44	17.98	33.55	5.65		30	19.06	33.51	5.43		23.89	403.6	0.124
	66	15.38	33.46	6.06		50	16.96	33.54	5.78		24.42	353.3	0.200
	88	13.72	33.44	5.90		75	14.61	33.45	6.03		24.88	310.2	0.283
	132	12.40	33.68	5.14		100	13.39	33.46	5.70		25.14	286.0	0.357
	177	9.68	33.64	4.53		150	11.37	33.67	4.82		25.69	234.3	0.487
	266	7.91	33.98	4.09		200	9.00	33.65	4.42		26.08	197.6	0.596
	355	6.68	34.07	2.02		250	8.13	33.89	4.20		26.41	167.6	0.687
	534	5.18	34.17	0.84		300	7.44	34.03	3.50		26.62	148.0	0.765
	806	4.51	34.42	0.50		400	6.12	34.10	1.50		26.85	126.4	0.903
	1204	3.31	34.54	0.93		500	5.34	34.14	0.93		26.98	115.1	1.023
						600	5.00	34.26	0.67		27.11	103.0	1.132
						700	4.79	34.35	0.55		27.21	94.7	1.231
						800	4.54	34.42	0.51		27.29	87.6	1.322
						1000	3.86	34.49	0.62		27.42	76.3	1.486
808	HORIZON; September 16, 1949; 2010 GCT; 31°45'N, 125°39'W; sounding, missing; wind, 360°, force 4; weather, cloudy; sea, rough; wire angle, 16°.												
	0	19.9	33.38E	5.29		0	19.9	33.38	5.29		23.58	432.8	0.000
	10	19.40	33.37	5.29		10	19.40	33.37	5.29		23.70	421.6	0.043
	24	19.20	33.38	5.49		20	19.25	33.38	5.44		23.74	417.5	0.085
	48	18.45	33.44	5.60		30	19.09	33.39	5.53		23.79	413.2	0.126
	72	14.75	33.48	6.13		50	18.37	33.45	5.61		24.02	392.3	0.207
	96	14.53	33.64	5.88		75	14.71	33.53	6.13		24.92	306.4	0.294
	144	11.91	33.45	5.35		100	14.48	33.64	5.81		25.05	294.4	0.372
	191	9.62	33.57	4.13		150	11.25	33.45	5.22		25.55	248.3	0.508
	284	8.02	34.12	1.84		200	9.40	33.61	3.82		25.99	206.8	0.621
	376	7.09	34.20	1.03		250	8.54	34.04	2.25		26.46	162.7	0.714
	561	6.03	34.32	0.35		300	7.80	34.14	1.67		26.65	145.1	0.791
	844	4.65	34.40	0.39		400	6.92	34.22	0.88		26.84	128.4	0.928
	1130	3.70	34.47	0.78		500	6.37	34.29	0.45		26.97	117.0	1.050
						600	5.82	34.34	0.35		27.08	107.6	1.163
						700	5.30	34.36	0.35		27.16	100.5	1.267
						800	4.83	34.39	0.36		27.23	93.5	1.364
						1000	4.10	34.44	0.57		27.35	82.7	1.540
809	HORIZON; September 16, 1949; 1419 GCT; 31°29'N, 126°20'W; sounding, missing; wind, 010°, force 2; weather, moderate rain shower; sea, rough; wire angle, 7°.												
	0	20.1	33.49E	5.33		0	20.1	33.49	5.33		23.63	427.4	0.000
	10	19.91	33.53	4.41		10	19.91	33.53	4.41		23.69	422.5	0.043
	25	19.77	33.49	5.40		20	19.83	33.50	4.98		23.69	422.8	0.085
	50	18.17	33.69	5.60		30	19.70	33.50	5.46		23.72	420.2	0.127
	74	15.53	33.78	5.98		50	18.17	33.69	5.60		24.26	369.0	0.206
	99	14.84	33.78	5.86		75	15.52	33.79	5.97		24.95	304.0	0.290
	149	12.67	33.58	5.51		100	14.83	33.78	5.86		25.09	290.1	0.364
	198	9.38	33.60	4.12		150	12.55	33.58	5.51		25.40	262.4	0.502
	297	7.94	33.98	2.38		200	9.34	33.60	4.06		25.99	206.6	0.619
	395	6.69	34.09	1.64		250	8.53	33.77	2.91		26.25	182.5	0.717
	592	4.84	34.11	0.67		300	7.90	33.99	2.37		26.52	157.6	0.802
	888	4.30	34.34	0.48		400	6.61	34.09	1.60		26.78	133.8	0.948
	1183	3.52	34.43	0.83		500	5.51	34.09	0.98		26.92	120.8	1.075
						600	4.80	34.11	0.65		27.02	111.9	1.192
						700	4.56	34.17	0.55		27.09	105.2	1.299
						800	4.45	34.27	0.50		27.18	97.5	1.401
						1000	4.00	34.39	0.55		27.32	85.2	1.583

E See footnote page 219.

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

HORIZON; September 16, 1949; 0739 GCT; 31°10'N, 127°08'W; sounding, missing; wind, 340°, force 3; weather, drizzle; sea, rough; wire angle, 20°. 810

0	20.3	33.55E	5.19	0	20.3	33.55	5.19	23.60	430.5	0.000
9	20.13	33.51	5.12	10	20.10	33.51	5.12	23.62	428.8	0.043
23	19.76	33.53	5.22	20	19.85	33.52	5.18	23.69	422.0	0.086
46	18.29	33.40	5.68	30	19.55	33.50	5.35	23.76	416.3	0.127
70	14.99	33.31	6.12	50	17.80	33.36	5.79	24.09	385.4	0.208
94	12.76	33.35	5.80	75	14.52	33.31	6.10	24.79	318.8	0.296
141	9.74	33.44	4.20	100	12.17	33.38	5.65	25.32	268.8	0.369
188	8.57	33.77	3.92	150	9.43	33.58	4.13	25.96	208.6	0.488
280	7.30	34.00	2.82	200	8.38	33.83	3.82	26.32	174.9	0.585
371	6.16	33.95	1.73	250	7.70	33.97	3.21	26.53	155.4	0.667
554	4.98	34.22	0.63	300	7.05	33.99	2.56	26.64	145.7	0.742
834	4.15	34.40	0.51	400	5.90	33.96	1.41	26.77	134.0	0.882
1122	3.45	34.47	0.99	500	5.25	34.13	0.77	26.98	114.7	1.006
				600	4.80	34.27	0.57	27.14	100.0	1.113
				700	4.50	34.35	0.54	27.24	91.2	1.209
				800	4.23	34.39	0.51	27.30	86.2	1.298
				1000	3.75	34.44	0.69	27.39	78.6	1.462

CREST; September 16, 1949; 1518 GCT; 32°40'N, 118°10'W; sounding, missing; wind, variable, force 2; weather, overcast; sea, moderate; wire angle, 3°. 901

0	19.7	33.68E	5.51	0.58	0	19.7	33.68	5.51	0.58	23.85	406.2	0.000
10	19.15	33.68	5.44	0.56	10	19.15	33.68	5.44	0.56	24.00	393.1	0.040
25	16.01	33.53	5.81	0.64	20	17.85	33.58	5.79	0.60	24.24	370.0	0.078
50	11.93	33.31	5.36	1.05	30	15.00	33.47	5.75	0.66	24.81	315.6	0.112
75	10.55	33.49	4.55	1.50	50	11.93	33.31	5.36	1.05	25.31	268.4	0.171
100	9.82	33.55	3.72	1.73	75	10.55	33.49	4.55	1.50	25.70	232.0	0.233
149	9.07	34.04	2.61	2.25	100	9.82	33.55	3.72	1.73	25.87	216.1	0.289
197	8.83	34.14	1.79	2.46	150	9.06	34.05	2.60	2.26	26.39	168.1	0.386
294	8.36	34.23	1.12	2.71	200	8.82	34.15	1.75	2.47	26.50	157.7	0.467
390	7.06	34.22	0.89	2.82	250	8.61	34.20	1.29	2.63	26.57	151.9	0.545
584	5.81	34.40	0.30	3.12	300	8.32	34.23	1.12	2.73	26.64	146.2	0.619
875	4.46	34.45	0.52	3.14	400	6.96	34.23	0.87	2.84	26.84	128.1	0.756
1166	3.55	34.52	0.75	3.05	500	6.28	34.33	0.52	3.02	27.01	112.9	0.876
					600	5.72	34.40	0.30	3.13	27.13	102.0	0.984
					700	5.19	34.42	0.37	3.14	27.22	94.5	1.082
					800	4.76	34.44	0.46	3.14	27.28	88.8	1.174
					1000	4.04	34.48	0.61	3.12	27.39	79.1	1.341

CREST; September 16, 1949; 0953 GCT; 32°22'N, 118°50'W; sounding, missing; wind, 350°, force 3; weather, overcast; sea, rough; wire angle, 0°. 902

0	18.5	33.73E	5.14	0.61	0	18.5	33.73	5.14	0.61	24.20	373.5	0.000
10	18.18	33.71	5.29	0.60	10	18.18	33.71	5.29	0.60	24.26	367.7	0.037
25	18.17	33.70	5.36	0.59	20	18.18	33.70	5.34	0.59	24.25	368.8	0.074
50	12.23	33.30	5.65	0.93	30	18.12	33.70	5.45	0.62	24.27	367.7	0.111
75	10.50	33.40	4.62	1.40	50	12.23	33.30	5.65	0.93	25.25	274.6	0.175
100	9.53	33.62	3.80	1.81	75	10.50	33.40	4.62	1.40	25.64	237.7	0.239
150	9.10	33.89	2.68	2.29	100	9.53	33.62	3.80	1.81	25.97	206.6	0.294
199	8.28	34.05	2.53	2.41	150	9.10	33.89	2.68	2.29	26.25	180.6	0.391
296	7.11	34.09	1.49	2.82	200	8.25	34.05	2.53	2.41	26.51	156.5	0.475
392	6.62	34.27	0.67	3.06	250	7.53	34.06	1.97	2.65	26.63	146.4	0.552
583	5.63	34.34	0.37	3.34	300	7.08	34.10	1.43	2.83	26.72	137.9	0.622
873	4.51	34.47	0.45	3.39	400	6.58	34.27	0.65	3.08	26.92	120.0	0.751
1170	3.69	34.52	0.82	3.26	500	6.03	34.30	0.44	3.25	27.02	111.8	0.867
					600	5.54	34.34	0.38	3.35	27.11	103.9	0.975
					700	5.12	34.38	0.38	3.37	27.19	96.6	1.075
					800	4.74	34.43	0.40	3.38	27.27	89.3	1.168
					1000	4.13	34.50	0.56	3.36	27.40	78.7	1.336

E For station 810 see footnote page 219. Evaporation of all salinity samples occurred on Cruise 4909 on stations 901 through 1210. Estimated average corrections to values given here can be made by subtracting 0.022 ‰ from the value of S, 0.015 from σ_t and by adding 1.7 to 10^5 δ at all depths; to ΔD add 0.002 for each 100 meter depth increment.

SIO

CCOFI

4909

OBSERVED					INTERPOLATED					COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P µg at/L	Z m	T °C	S ‰	O_2 ml/L	PO_4-P µg at/L	σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m
903	CREST; September 16, 1949; 0420 GCT; 32°05'N, 119°32'W; sounding, missing; wind, 320°, force 3; weather, overcast; sea, moderate; wire angle, 18°.											
0	19.0	33.75E	5.37	0.60	0	19.0	33.75	5.37	0.60	24.09	384.0	0.000
10	18.28	33.75	5.11	0.56	10	18.28	33.75	5.11	0.56	24.27	367.0	0.038
25	18.11	33.77	5.04	0.61	20	18.17	33.77	5.07	0.58	24.31	363.5	0.074
48	11.67	33.64	4.40	1.45	30	18.02	33.76	5.00	0.70	24.34	361.0	0.110
72	9.75	33.73	3.28	1.96	50	11.51	33.65	4.39	1.54	25.65	236.0	0.170
95	9.14	33.89	2.57	2.17	75	9.63	33.75	3.17	2.00	26.06	197.8	0.224
139	8.51	34.07	1.98	2.45	100	9.07	33.92	2.50	2.21	26.28	176.7	0.271
184	7.58	34.16	1.49	2.62	150	8.23	34.09	1.84	2.50	26.55	152.6	0.353
273	7.22	34.27	0.90	2.82	200	7.48	34.18	1.37	2.67	26.73	135.8	0.426
364	6.72	34.33	0.60	2.99	250	7.30	34.25	1.04	2.77	26.81	129.1	0.492
547	5.82	34.34	0.30	3.09	300	7.08	34.30	0.78	2.87	26.88	123.1	0.555
825	4.69	34.43	0.37	3.23	400	6.55	34.33	0.50	3.04	26.97	115.3	0.673
1106	3.83	34.49	0.67	3.22	500	6.05	34.33	0.32	3.07	27.04	109.9	0.787
					600	5.58	34.36	0.30	3.13	27.12	102.9	0.893
					700	5.16	34.39	0.32	3.20	27.20	96.3	0.993
					800	4.78	34.42	0.36	3.23	27.26	90.6	1.086
					1000	4.14	34.48	0.53	3.23	27.38	80.3	1.257
904	CREST; September 15, 1949; 1955, 2118 GCT; 31°46'N, 120°15'W; sounding, missing; wind, 320°, force 4; weather, drizzle; sea, very rough; wire angle, 20°, 32°.											
0	18.3	33.40E	5.66	0.59	0	18.3	33.40	5.66	0.59	24.00	392.7	0.000
9	17.69	33.39	5.72	0.56	10	17.68	33.39	5.72	0.56	24.14	379.2	0.039
24	17.61	33.42	5.43	0.57	20	17.63	33.41	5.47	0.56	24.16	377.3	0.076
47	16.59	33.37	5.40	0.58	30	17.53	33.41	5.41	0.57	24.19	375.3	0.114
70	13.20	33.34	5.53	0.83	50	16.05	33.36	5.43	0.60	24.50	346.3	0.186
94	11.40	33.42	5.01	1.18	75	12.75	33.34	5.48	0.40	25.18	281.9	0.265
140	9.45	33.71	3.52	1.94	100	11.07	33.44	4.86	1.24	25.57	245.0	0.331
186	8.70	34.00	2.46	2.39	150	9.24	33.80	3.25	2.08	26.16	189.3	0.440
276	7.70	34.15	1.60	2.68	200	8.52	34.04	2.30	2.45	26.46	161.4	0.527
364	7.09	34.23	0.97	2.88	250	7.96	34.12	1.81	2.61	26.61	148.0	0.604
541	5.95	34.32[a]	0.45	3.21	300	7.52	34.18	1.41	2.73	26.72	138.1	0.676
814	4.64	34.47	0.45	3.24	400	6.85	34.25	0.79	2.96	26.87	125.2	0.808
1218	3.46	34.57	1.01r	3.11r	500	6.22	34.30	0.52	3.17	26.99	114.3	0.927
					600	5.62	34.34	0.45	3.22	27.10	105.0	1.037
876	4.48	34.44	0.49	3.25	700	5.11	34.39	0.45	3.21	27.20	95.8	1.137
1053	3.87	34.47	0.67	3.21	800	4.69	34.43	0.45	3.20	27.28	88.6	1.229
1322	3.19	34.57	1.04	3.15	1000	4.03	34.50	0.59	3.16	27.41	77.4	1.395
1774	2.39	34.40r	1.64	2.95	1200	3.51	34.55	0.83	3.18	27.50	69.3	1.543
2240	1.92	34.64	2.16	2.78	1500	2.84	34.60	1.30	3.07	27.60	59.7	1.736
3210	1.68	34.65	2.76	2.62	2000	2.12	34.63	1.92	2.87	27.69	51.5	2.013
					2500	1.81	34.65	2.35	2.71	27.73	47.9	2.263
					3000	1.70	34.65	2.63	2.63	27.74	48.1	2.503

a) Smooth curve drawn from 541 meters to 1322 meters through overlapping salinity values.

E See footnote page 233.

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

CREST; September 15, 1949; 1359 GCT; 31°25'N, 120°53'W; sounding, missing; wind, 320°, force 4; weather, fog in patches; sea, rough; wire angle, 13°. 905

0	18.3	33.48E	0.72	0	18.3	33.48	0.72	24.06	386.9	0.000
10	17.76	33.46	0.59	10	17.76	33.46	0.59	24.17	376.0	0.038
25	17.76	33.45	0.59	20	17.77	33.45	0.58	24.16	377.5	0.076
49	14.74	33.40	0.65	30	17.74	33.44	0.59	24.16	377.9	0.113
73	11.85	33.28	0.95	50	14.24	33.40	0.66	24.92	305.8	0.182
97	10.81	33.40	1.41	75	11.82	33.28	0.98	25.31	269.2	0.254
146	9.14	33.68	2.17	100	10.68	33.41	1.48	25.61	240.6	0.318
194	8.58	33.98	2.40	150	9.09	33.72	2.20	26.12	192.8	0.426
290	7.59	34.16	2.79	200	8.52	34.00	2.43	26.43	164.3	0.515
384	6.92	34.21	3.16	250	7.97	34.11	2.60	26.60	148.9	0.593
575	5.69	34.33	3.31	300	7.50	34.16	2.84	26.71	139.3	0.666
864	4.35	34.46	3.44	400	6.80	34.22	3.18	26.85	126.8	0.799
1278	3.34	34.52	3.39	500	6.16	34.28	3.25	26.99	115.0	0.920
				600	5.54	34.34	3.32	27.11	103.9	1.029
				700	5.04	34.40	3.38	27.22	94.1	1.128
				800	4.59	34.44	3.42	27.30	86.6	1.218
				1000	3.94	34.49	3.44	27.41	77.3	1.382

CREST; September 15, 1949; 0837 GCT; 31°06'N, 121°34'W; sounding, missing; wind, 340°, force 4; weather, cloudy; sea, very rough; wire angle, 13°. 906

0	19.0	33.48E	0.77	0	19.0	33.48	0.77	23.88	403.5	0.000
10	18.71	33.49	0.62	10	18.71	33.49	0.62	23.96	396.3	0.040
24	18.71	33.44	0.58	20	18.71	33.45	0.59	23.93	399.5	0.080
48	15.36	33.30	0.60	30	18.64	33.41	0.58	23.92	401.1	0.120
72	12.78	33.26	0.81	50	15.05	33.29	0.61	24.66	330.2	0.193
96	11.34	33.35	1.14	75	12.59	33.26	0.84	25.15	284.8	0.270
143	9.40	33.48	1.86	100	11.17	33.36	1.20	25.49	252.6	0.337
191	8.70	33.89	2.35	150	9.26	33.53	1.98	25.95	209.6	0.452
286	7.14	34.05	2.74	200	8.58	33.91	2.39	26.35	171.7	0.548
380	6.72	34.16	3.23	250	7.59	34.00	2.57	26.57	151.6	0.628
572	5.58	34.25	3.45	300	7.06	34.07	2.85	26.70	139.8	0.702
860	4.30	34.40	3.48	400	6.58	34.17	3.29	26.84	127.5	0.834
1270	3.26	34.51	3.34	500	5.99	34.22	3.44	26.96	117.1	0.957
				600	5.43	34.26	3.46	27.06	108.6	1.070
				700	4.93	34.32	3.47	27.17	98.6	1.173
				800	4.52	34.37	3.48	27.25	90.9	1.268
				1000	3.87	34.45	3.46	27.38	79.3	1.439

CREST; September 15, 1949; 0300 GCT; 30°47'N, 122°14'W; sounding, missing; wind, 350°, force 4; weather, cloudy; sea, very rough; wire angle, 25°. 907

0	19.0	33.26E	0.63	0	19.0	33.26	0.63	23.72	419.5	0.000
10	18.37	33.37	0.45	10	18.37	33.37	0.45	23.96	396.7	0.041
23	18.25	33.31	0.49	20	18.28	33.32	0.48	23.94	398.7	0.081
46	15.51	33.35	0.49	30	18.09	33.32	0.50	23.98	394.7	0.120
68	12.49	33.17	0.68	50	14.85	33.34	0.49	24.75	321.8	0.192
91	11.17	33.21	1.00	75	12.07	33.18	0.80	25.18	281.4	0.267
135	9.78	33.55	1.66	100	10.78	33.25	1.07	25.47	254.0	0.334
179	9.02	33.87	2.13	150	9.51	33.71	1.90	26.05	200.2	0.448
265	7.85	34.02	2.48	200	8.71	33.93	2.22	26.35	172.3	0.541
350	6.76	34.07	2.82	250	8.03	34.01	2.41	26.51	157.2	0.623
524	5.58	34.27	3.12	300	7.35	34.03	2.63	26.63	146.7	0.700
794	4.44	34.34	3.16	400	6.34	34.13	2.96	26.84	127.2	0.836
1201	3.41	34.52	3.11	500	5.72	34.25	3.11	27.02	111.7	0.955
				600	5.19	34.30	3.14	27.12	102.4	1.013
				700	4.78	34.32	3.15	27.18	96.8	1.112
				800	4.43	34.34	3.16	27.24	92.3	1.207
				1000	3.87	34.44	3.15	27.38	80.0	1.379

E See footnote page 233.

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

908 CREST, September 14, 1949; 2114 GCT; 30°25'N, 122°56'W; sounding, missing; wind, 340°, force 4: weather, cloudy; sea, rough; wire angle, 25°.

0	19.3	33.22E	0.51	0	19.3	33.22	0.51	23.61	429.1	0.000
10	18.73	33.28	0.45	10	18.73	33.28	0.45	23.80	411.7	0.042
23	18.24	33.24	0.44	20	18.35	33.25	0.44	23.87	405.4	0.083
44	17.55	33.31	0.47	30	18.02	33.25	0.45	23.96	397.3	0.123
66	15.20	33.44	0.38	50	17.25	33.33	0.46	24.20	375.0	0.200
88	13.72	33.44	0.42	75	14.55	33.44	0.39	24.89	309.7	0.286
131	11.24	33.35	1.03	100	13.05	33.42	0.51	25.18	282.2	0.360
175	9.28	33.66	1.82	150	10.20	33.48	1.36	25.75	228.3	0.487
263	7.73	34.04	2.40	200	8.62	33.82	2.05	26.28	179.2	0.590
351	6.80	34.07	2.76	250	7.87	34.02	2.34	26.55	154.2	0.673
528	5.67	34.31	3.13	300	7.28	34.06	2.56	26.66	143.4	0.747
796	4.52	34.40	3.22	400	6.44	34.13	2.90	26.83	128.5	0.883
1190	3.40	34.52	3.07	500	5.84	34.28	3.09	27.03	110.8	1.002
				600	5.31	34.34	3.18	27.14	101.0	1.108
				700	4.88	34.37	3.21	27.21	94.1	1.206
				800	4.51	34.40	3.22	27.28	88.7	1.297
				1000	3.89	34.46	3.16	27.39	78.8	1.465

909 CREST; September 14, 1949; 1625 GCT; 30°12'N, 123°37'W; sounding, missing; wind, 350°, force 4; weather, cloudy; sea, rough; wire angle, 30°.

0	19.7	33.42E	0.51	0	19.7	33.42	0.51	23.66	425.1	0.000
8	19.11	33.42	0.51	10	19.11	33.42	0.51	23.81	411.0	0.042
21	19.13	33.42	0.47	20	19.12	33.42	0.48	23.81	411.3	0.083
42	18.74	33.44	0.45	30	19.07	33.43	0.46	23.83	409.9	0.124
62	16.26	33.48	0.42	50	18.27	33.45	0.43	24.04	389.8	0.204
83	14.67	33.58	0.43	75	15.13	33.53	0.42	24.83	315.1	0.292
123	13.42	33.58	0.58	100	14.20	33.58	0.47	25.07	293.1	0.368
163	10.18	33.53	1.25	150	11.03	33.54	1.04	25.65	237.9	0.501
245	8.13	33.87	1.93	200	9.01	33.65	1.58	26.08	197.8	0.609
327	7.02	34.02	2.40	250	8.02	33.88	1.96	26.41	166.9	0.701
494	5.79	34.22	3.05	300	7.31	33.98	2.26	26.60	149.8	0.780
747	4.58	34.33	3.15	400	6.39	34.13	2.75	26.84	127.8	0.919
1108	3.59	34.49	3.09	500	5.77	34.22	3.06	26.99	114.5	1.040
				600	5.22	34.27	3.13	27.09	105.0	1.150
				700	4.76	34.31	3.14	27.18	97.2	1.251
				800	4.38	34.35	3.15	27.25	90.6	1.345
				1000	3.81	34.44	3.12	27.38	79.4	1.515

910 CREST; September 14, 1949; 1123 GCT; 29°43'N, 124°16'W; sounding, missing; wind, 340°, force 3; weather, overcast; sea, rough; wire angle, 15°.

0	19.9	33.53E	0.41	0	19.9	33.53	0.41	23.69	422.0	0.000
10	19.34	33.51	0.43	10	19.34	33.51	0.43	23.82	410.2	0.042
24	19.27	33.60	0.43	20	19.28	33.56	0.43	23.87	405.4	0.082
48	18.81	33.69	0.44	30	19.22	33.63	0.43	23.94	399.0	0.123
72	15.87	33.69	0.40	50	18.74	33.69	0.44	24.11	383;6	0.201
95	15.14	33.78	0.42	75	15.80	33.70	0.40	24.81	316.9	0.288
142	12.77	33.60	0.64	100	14.97	33.78	0.42	25.06	294.0	0.365
188	10.10	33.60	1.26	150	11.99	33.60	0.72	25.53	250.3	0.501
281	8.18	33.98	2.14	200	9.75	33.63	1.39	25.94	211.0	0.616
372	6.66	34.05	3.02	250	8.75	33.87	1.86	26.29	178.3	0.714
557	5.46	34.27	3.23	300	7.77	33.99	2.34	26.54	155.7	0.797
839	4.28	34.42	3.39	400	6.42	34.09	3.11	26.80	131.2	0.941
1133	3.55	34.52	3.34	500	5.78	34.22	3.19	26.99	114.6	1.064
				600	5.24	34.29	3.26	27.10	103.8	1.173
				700	4.78	34.35	3.35	27.21	94.5	1.272
				800	4.41	34.40	3.38	27.29	87.5	1.363
				1000	3.84	34.48	3.38	27.41	76.8	1.527

E See footnote page 233.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

CREST; September 14, 1949; 0426, 0553 GCT; 29°34'N, 124°50'W; sounding, missing; wind, 360°, force 4; weather, overcast; sea, rough; wire angle, 20°, 18°. 911

0	20.3	33.78E		0.48	0	20.3	33.78		0.48	23.77	413.8	0.000
9	19.84	33.73		0.50	10	19.83	33.73		0.50	23.86	406.2	0.041
23	19.77	33.77		0.46	20	19.79	33.77		0.47	23.90	402.4	0.082
46	19.34	33.76		0.44	30	19.70	33.77		0.45	23.92	400.6	0.122
69	16.72	33.77		0.40	50	19.10	33.76		0.43	24.07	387.3	0.200
92	15.30	33.73		0.38	75	16.21	33.76		0.39	24.77	321.4	0.289
136	-	33.82		0.72	100	14.99	33.74		0.41	25.02	297.4	0.366
179	10.66	33.63		1.32	150	12.33	33.75		0.90	25.58	245.7	0.502
266	-	34.05		2.03	200	10.00	33.69		1.46	25.95	210.6	0.616
353	7.63	34.20		2.63	250	9.06	33.98		1.87	26.33	174.9	0.713
529	5.88	34.27		2.97[a]	300	8.32	34.13		2.32	26.56	153.5	0.795
800	4.56	34.42		3.16	400	7.11	34.24		2.78	26.83	129.5	0.936
1088	3.73	34.55[b]		3.02r	500	6.13	34.26		2.94	26.97	116.9	1.059
					600	5.48	34.31		3.02	27.09	105.3	1.170
942	4.10	34.49		3.26	700	4.98	34.37		3.09	27.20	95.4	1.270
1132	3.58	34.52[b]		3.26	800	4.56	34.42		3.16	27.29	87.6	1.361
1414	3.00	34.58		3.09r	1000	3.94	34.51		3.26	27.42	76.5	1.525
1887	2.22	34.61		3.21	1200	3.44	34.55		3.26	27.51	68.4	1.671
2363	1.88	34.63		2.90	1500	2.82	34.58		3.26	27.59	61.0	1.865
3346	1.59	34.67		2.86	2000	2.11	34.62		3.15	27.68	52.1	2.147
					2500	1.82	34.64		2.86	27.72	48.6	2.400
					3000	1.66	34.66		2.86	27.75	46.7	2.638

CREST; September 11, 1949; 1250 GCT; 31°19'N, 116°54'W; sounding, missing; wind, 320°, force 3; weather, cloudy; sea, rough; wire angle, 2°. 1001

0	20.0	33.58E	5.36	0.57	0	20.0	33.58	5.36	0.57	23.70	420.9	0.000
10	19.46	33.58	5.07	0.57	10	19.46	33.58	5.07	0.57	23.84	408.0	0.041
25	16.98	33.53	5.35	0.56	20	18.64	33.55	5.29	0.56	24.02	390.6	0.081
50	13.22	33.32	5.67	0.68	30	15.47	33.50	5.48	0.58	24.73	323.1	0.117
74	-	33.46	4.91	1.04	50	13.22	33.32	5.67	0.68	25.07	291.6	0.178
98	10.72	33.58	3.82	1.63	75	11.56	33.46	4.88	1.05	25.50	251.3	0.246
148	9.85	33.93	2.69	2.13	100	10.68	33.60	3.73	1.66	25.76	226.6	0.306
196	9.28	34.07	2.17	2.34	150	9.83	33.95	2.66	2.14	26.18	187.8	0.410
294	7.63	34.09	1.56	2.74	200	9.21	34.07	2.13	2.36	26.38	169.8	0.499
392	6.76	34.18	0.90	3.14	250	8.37	34.08	1.82	2.57	26.52	156.9	0.580
589	5.72	34.33	0.34	3.34	300	7.57	34.09	1.50	2.77	26.64	145.4	0.656
884	4.56	34.40	0.50	3.29	400	6.77	34.18	0.87	3.16	26.83	129.2	0.794
					500	6.17	34.28	0.48	3.32	26.99	115.1	0.916
					600	5.67	33.34	0.34	3.34	27.09	105.5	1.026
					700	5.23	33.36	0.35	3.32	27.16	99.5	1.129
					800	4.86	34.38	0.42	3.30	27.22	94.5	1.226
					1000	(4.14)	(34.43)	-	-	(27.34)	(84.0)	(1.404)

a) Second value at 3.07 rejected.
b) Overlapping salinity curves smoothed out through these values.

Ɛ See footnote page 233.

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
1002	CREST; September 11, 1949; 1807 GCT; 30°58'N, 117°33'W; sounding, missing; wind, 320°, force 3; weather, cloudy; sea, rough; wire angle, 10°.											
0	19.9	33.53E	5.19	0.60	0	19.9	33.53	5.19	0.60	23.69	421.6	0.000
10	19.49	33.60	5.20	0.60	10	19.49	33.60	5.20	0.60	23.85	406.9	0.041
25	17.91	33.55	5.58	0.65	20	18.60	33.57	5.51	0.63	24.05	388.1	0.081
49	13.52	33.45	6.13	0.65	30	17.19	33.52	5.80	0.64	24.35	359.4	0.118
74	11.14	33.42	4.89	1.23	50	13.35	33.45	6.10	0.67	25.14	284.5	0.183
97	10.32	33.60	3.81	1.77	75	11.07	33.42	4.80	1.24	25.55	245.8	0.249
144	9.51	33.94	2.72	2.33	100	10.26	33.63	3.68	1.83	25.86	217.2	0.307
191	9.08	34.13	2.16	2.50	150	9.45	33.98	2.62	2.36	26.27	179.3	0.406
283	8.16[a]	34.30	1.17	2.80	200	8.98	34.16	2.03	2.53	26.49	159.5	0.491
376	9.49r	34.27	1.14	2.81	250	8.48	34.28	1.35	2.76	26.66	143.8	0.566
562	6.11	34.33	0.42	3.34	300	8.01	34.30	1.17	2.80	26.74	136.3	0.637
844	4.60	34.43	0.47	3.43	400	7.19	34.27	1.05	2.82	26.84	128.2	0.769
1248	3.32	34.52	0.93	3.47	500	6.50	34.31	0.57	3.12	26.97	117.3	0.892
					600	5.89	34.34	0.42	3.38	27.07	108.2	1.005
					700	5.34	34.38	0.42	3.40	27.17	99.5	1.108
					800	4.82	34.41	0.43	3.41	27.25	91.9	1.204
					1000	4.01	34.47	0.56	3.46	27.39	79.5	1.375
1003	CREST; September 11, 1949; 2241 GCT; 30°37'N, 118°11'W; sounding, missing; wind, 320°, force 4; weather, partly cloudy; sea, rough; wire angle, 15°.											
0	20.5	33.75E	5.27	0.58	0	20.5	33.75	5.27	0.58	23.70	421.0	0.000
10	20.44	33.73	4.85	0.54	10	20.44	33.73	4.85	0.54	23.70	421.5	0.042
24	19.93	33.75	5.20	0.50	20	20.11	33.75	5.07	0.51	23.80	411.9	0.084
47	15.24	33.49	5.96	0.68	30	19.55	33.66	5.43	0.51	23.88	404.9	0.125
70	11.84	33.40	5.24	1.06	50	14.52	33.48	5.92	0.73	24.92	305.5	0.196
92	10.88	33.64	3.91	1.67	75	11.57	33.42	4.95	1.17	25.46	254.5	0.266
137	9.43	33.91	2.66	2.09	100	10.49	33.70	3.46	1.81	25.87	215.9	0.324
183	8.87	34.10	2.28	2.30	150	9.28	33.97	2.50	2.15	26.29	177.1	0.423
275	7.22	34.09	1.90	2.71	200	8.53	34.11	2.20	2.37	26.52	156.5	0.506
368	6.44	34.16	1.18	3.11	250	7.58	34.09	2.03	2.60	26.64	144.8	0.581
557	5.69	34.33	0.36	3.25	300	6.95	34.09	1.68	2.84	26.73	137.0	0.652
844	4.48	34.45	0.44	3.23	400	6.29	34.19	0.98	3.17	26.90	121.9	0.781
1135	3.63	34.52	0.79	3.25	500	5.94	34.28	0.48	3.24	27.01	112.2	0.898
					600	5.48	34.35	0.36	3.24	27.12	102.4	1.006
					700	5.02	34.40	0.41	3.24	27.22	93.9	1.104
					800	4.63	34.44	0.43	3.23	27.30	87.2	1.194
					1000	3.99	34.49	0.55	3.26	27.41	77.7	1.359
1004	CREST; September 12, 1949; 0426 GCT; 30°15'N, 118°50'W; sounding, missing; wind, 320°, force 4; weather, partly cloudy; sea, rough; wire angle, 13°.											
0	20.8	33.86E	5.34	0.48	0	20.8	33.86	5.34	0.48	23.70	420.7	0.000
10	20.14	33.84	5.07	0.53	10	20.14	33.84	5.07	0.53	23.86	405.8	0.041
24	20.12	33.85	5.94	0.52	20	20.11	33.85	5.92	0.53	23.88	404.6	0.082
48	12.31	33.55	5.31	1.03	30	20.01	33.84	5.87	0.52	23.90	403.3	0.122
72	11.10	33.59	4.26	1.53	50	12.20	33.55	5.19	1.06	25.45	255.7	0.188
96	9.86	33.82	2.80	2.08	75	10.87	33.60	4.00	1.60	25.73	229.1	0.249
145	9.33	34.07	2.36	2.30	100	9.81	33.85	2.71	2.12	26.10	194.0	0.302
193	8.08	33.96	2.40	2.36	150	9.21	34.07	2.35	2.30	26.38	169.0	0.393
288	7.64	34.27	1.00	3.02	200	8.03	33.96	2.33	2.38	26.47	160.1	0.474
383	6.77	34.20	0.67	3.24	250	7.79	34.15	1.37	2.74	26.66	143.4	0.550
572	5.71	34.37	0.37	3.41	300	7.54	34.26	0.94	3.06	26.78	132.4	0.619
857	4.41	34.38	0.53	3.50	400	6.68	34.20	0.61	3.27	26.86	126.4	0.749
1150	3.62	34.54	0.80	3.51	500	6.12	34.30	0.41	3.36	27.01	113.1	0.869
					600	5.58	34.37	0.38	3.42	27.13	102.1	0.976
					700	5.09	34.37	0.45	3.46	27.19	96.9	1.076
					800	4.63	34.37	0.51	3.49	27.24	92.4	1.170
					1000	3.97	34.45	0.65	3.51	27.37	80.4	1.343

a) Middle thermometer reading of 8.66° rejected.

E See footnote page 233.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

CREST; September 12, 1949; 0933 GCT; 29°53'N, 119°29'W; sounding, missing; wind, 320°, force 4; weather, overcast; sea, rough; wire angle, 20°. 1005

0	19.7	33.58E	5.30	0.63	0	19.7	33.58	5.30	0.63	23.78	413.4	0.000
10	19.12	33.58	5.39	0.60	10	19.12	33.58	5.39	0.60	23.93	399.6	0.041
24	19.11	33.60	5.44	0.58	20	19.10	33.59	5.44	0.58	23.94	398.7	0.081
47	15.07	33.33	6.04	0.60	30	19.07	33.58	5.75	0.58	23.94	399.0	0.120
70	12.97	33.40	5.87	0.74	50	14.66	33.33	6.03	0.61	24.78	319.2	0.192
93	12.08	33.53	5.52	0.96	75	12.76	33.43	5.81	0.78	25.25	275.3	0.266
139	9.67	33.58	4.52	1.77	100	11.79	33.55	5.40	1.06	25.53	249.2	0.332
184	9.14	34.02	2.79	2.34	150	9.50	33.62	4.20	1.92	25.98	206.7	0.447
273	8.42	34.27	1.27	2.38	200	9.01	34.10	2.27	2.48	26.43	164.5	0.539
361	7.50	34.31	0.76	3.21	250	8.60	34.24	1.50	2.80	26.61	148.8	0.617
539	5.93	34.33	0.40	3.50	300	8.15	34.29	1.10	3.02	26.71	139.3	0.690
805	4.58	34.43	0.44	3.59	400	7.11	34.32	0.66	3.31	26.89	123.6	0.820
1181	3.46	34.54	0.94	3.45	500	6.24	34.32	0.44	3.46	27.01	113.2	0.940
					600	5.56	34.35	0.40	3.54	27.12	103.4	1.048
					700	5.03	34.39	0.40	3.58	27.21	94.8	1.147
					800	4.59	34.43	0.44	3.59	27.29	87.3	1.238
					1000	3.91	34.50	0.78	3.54	27.42	76.1	1.401

CREST; September 12, 1949; 1442 GCT; 29°31'N, 120°09'W; sounding, missing; wind, 340°, force 4; weather, partly cloudy; sea, rough; wire angle, 28°. 1006

0	20.1	33.64E	5.45	0.66	0	20.1	33.64	5.45	0.66	23.72	419.1	0.000
9	19.40	33.62	5.30	0.62	10	19.40	33.62	5.30	0.62	23.89	403.5	0.041
22	19.41	33.62	5.40	0.62	20	19.40	33.62	5.34	0.62	23.89	403.8	0.082
44	19.42	33.66	5.34	0.57	30	19.42	33.63	5.40	0.59	23.89	404.0	0.122
66	15.46	33.55	6.10	0.57	50	19.25	33.65	5.35	0.57	23.95	398.9	0.202
87	14.42	33.60	5.75	0.61	75	15.00	33.57	6.05	0.59	24.89	309.5	0.291
128	12.67	33.55	5.30	0.86	100	13.85	33.59	5.60	0.66	25.15	285.4	0.365
169	9.90	33.58	4.51	1.59	150	10.84	33.56	4.90	1.32	25.70	233.2	0.494
252	7.94	34.02	2.97	2.37	200	9.05	33.76	3.91	1.92	26.16	190.2	0.601
337	6.89	34.07	1.54	2.95	250	8.00	34.02	3.00	2.36	26.53	156.0	0.687
510	5.63	34.27	0.57	3.43	300	7.25	34.05	2.15	2.72	26.66	143.8	0.762
773	4.42	34.40	0.53	3.53	400	6.37	34.14	0.97	3.20	26.85	126.8	0.897
1044	3.75	34.54	1.07	3.41	500	5.69	34.26	0.59	3.42	27.03	110.5	1.016
					600	5.13	34.31	0.53	3.51	27.13	101.0	1.122
					700	4.69	34.36	0.53	3.53	27.23	92.7	1.218
					800	4.32	34.41	0.58	3.53	27.31	85.8	1.308
					1000	3.84	34.51	0.98	3.44	27.43	74.5	1.467

CREST; September 12, 1949; 1938 GCT; 29°10'N, 120°48'W; sounding, missing; wind, 330°, force 4; weather, partly cloudy; sea, rough; wire angle, 20°. 1007

0	20.1	33.68E	5.23	0.55	0	20.1	33.68	5.23	0.55	23.75	416.1	0.000
10	19.67	33.68	5.23	0.58	10	19.67	33.68	5.23	0.58	23.86	405.7	0.041
24	19.57	33.71	5.34	0.52	20	19.60	33.70	5.32	0.54	23.90	402.9	0.082
46	19.62	33.95	5.30	0.52	30	19.58	33.78	5.34	0.52	23.96	397.0	0.122
70	16.23	33.72	5.92	0.54	50	19.61	33.95	5.40	0.52	24.08	385.9	0.200
93	14.26	33.60	5.60	0.62	75	15.67	33.68	5.90	0.55	24.83	315.4	0.287
139	12.08	33.57	4.93	1.03	100	13.84	33.59	5.52	0.65	25.15	285.3	0.363
184	10.04	33.78	3.31	1.99	150	11.57	33.60	4.52	1.22	25.60	242.9	0.494
274	8.14	34.04	2.56	2.33	200	9.63	33.83	3.11	2.05	26.12	194.2	0.604
363	6.93	34.18	1.38	2.87	250	8.54	33.98	2.74	2.22	26.41	167.2	0.694
544	5.71	34.33	0.42	3.31	300	7.73	34.09	2.30	2.49	26.62	147.8	0.773
821	4.46	34.47	0.56	3.29	400	6.65	34.22	1.06	3.06	26.87	124.6	0.909
1109	3.62	34.53	0.87	-	500	5.98	34.30	0.56	3.27	27.03	111.1	1.027
					600	5.41	34.36	0.43	3.32	27.14	100.9	1.133
					700	4.93	34.42	0.45	3.30	27.25	91.4	1.229
					800	4.54	34.46	0.51	3.30	27.32	84.6	1.317
					1000	3.90	34.51	0.79	-	27.43	74.5	1.476

E See footnote page 233.

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

1008 CREST; September 13, 1949; 0030 GCT; 28°50'N, 121°20'W; sounding, missing; wind, 330°, force 4; weather, partly cloudy; sea, rough; wire angle, 23°.

0	20.4	33.89E	5.30	0.53	0	20.4	33.89	5.30	0.53	23.83	408.3	0.000
10	19.91	33.89	5.04	0.52	10	19.91	33.89	5.04	0.52	23.96	396.3	0.040
23	19.73	33.93	5.23	0.53	20	19.75	33.92	5.22	0.53	24.02	390.6	0.080
45	19.64	33.91	5.15	0.48	30	19.70	33.93	5.21	0.52	24.04	389.1	0.118
68	15.03	33.49	6.04	0.53	50	19.60	33.87	5.16	0.48	24.02	391.6	0.197
89	14.12	33.48	5.86	0.55	75	14.55	33.48	6.02	0.54	24.92	306.8	0.284
133	13.39	33.58	5.59	0.71	100	13.92	33.50	5.80	0.58	25.07	293.3	0.359
175	10.80	33.58	4.70	1.29	150	12.49	33.58	5.25	0.86	25.41	261.1	0.497
258	8.86	34.04	2.86	2.17	200	10.03	33.67	4.15	1.61	25.93	212.5	0.616
340	7.94	34.11	0.84	2.72	250	9.00	34.02	3.06	2.10	26.37	171.1	0.712
507	6.59	34.29	0.49	3.24	300	8.32	34.08	1.20	2.48	26.52	157.3	0.794
763	4.84	34.40	0.41	3.38	400	7.45	34.17	0.66	2.98	26.72	139.4	0.942
1132	3.76	34.47	0.74	3.35	500	6.67	34.28	0.49	3.22	26.92	121.9	1.073
					600	5.85	34.34	0.41	3.31	27.07	107.9	1.188
					700	5.18	34.38	0.41	3.36	27.19	97.4	1.290
					800	4.69	34.41	0.43	3.38	27.27	90.1	1.384
					1000	4.02	34.45	0.58	3.38	27.37	81.0	1.555

1009 CREST; September 13, 1949; 0534 GCT; 28°30'N, 121°50'W; sounding, missing; wind, 340°, force 3; weather, partly cloudy; sea, rough; wire angle, 10°.

0	20.6	33.91E	5.17	0.48	0	20.6	33.91	5.17	0.48	23.79	411.9	0.000
10	19.98	33.93	5.40	0.49	10	19.98	33.93	5.40	0.49	23.98	394.9	0.040
25	19.90	33.93	5.17	0.51	20	19.91	33.93	5.23	0.51	23.99	393.8	0.080
49	17.22	33.82	5.44	0.51	30	19.86	33.92	5.17	0.52	24.00	393.6	0.119
74	16.31	33.93	5.59	0.47	50	17.20	33.82	5.47	0.51	24.58	338.3	0.192
98	15.07	33.75	5.52	0.49	75	16.30	33.93	5.59	0.47	24.88	310.9	0.274
148	12.74	33.69	4.78	0.97	100	14.94	33.75	5.50	0.50	25.04	295.9	0.349
197	10.08	33.75	3.68	1.72	150	12.60	33.69	4.77	1.01	25.48	255.2	0.487
295	9.08	34.23	1.70	2.53	200	10.01	33.77	3.62	1.76	26.01	204.9	0.603
392	8.15	34.31	0.83	2.97	250	9.41	34.04	2.45	2.26	26.32	176.3	0.698
583	5.89	34.36	0.47	3.18	300	9.05	34.24	1.62	2.56	26.54	156.5	0.781
871	4.48	34.38	0.53	3.23	400	8.03	34.31	0.80	3.00	26.75	137.6	0.928
1164	3.71	34.43	0.79	3.19	500	6.71	34.35	0.56	3.14	26.97	117.3	1.055
					600	5.79	34.36	0.47	3.18	27.09	105.6	1.167
					700	5.18	34.37	0.48	3.21	27.18	98.1	1.269
					800	4.76	34.38	0.50	3.23	27.23	93.3	1.364
					1000	4.07	34.40	0.64	3.22	27.32	85.3	1.543

1010 CREST; September 13, 1949; 1012 GCT; 28°12'N, 122°25'W; sounding, missing; wind, 360°, force 3; weather, partly cloudy; sea, slight; wire angle, 9°.

0	20.4	33.87E	5.25	0.42	0	20.4	33.87	5.25	0.42	23.82	409.8	0.000
10	19.98	33.89	5.10	0.39	10	19.98	33.89	5.10	0.39	23.94	398.7	0.040
25	19.98	33.89	5.18	0.41	20	19.98	33.89	5.15	0.40	23.94	399.1	0.080
49	19.04	33.82	5.40	0.42	30	19.94	33.88	5.21	0.41	23.94	398.6	0.120
74	15.36	33.60	5.72	0.47	50	18.93	33.82	5.41	0.42	24.16	378.5	0.198
98	14.58	33.60	5.49	0.49	75	15.33	33.60	5.74	0.47	24.84	314.2	0.284
148	12.66	33.48	4.76	1.06	100	14.51	33.60	5.45	0.49	25.02	298.0	0.361
197	10.66	33.82	2.54	2.09	150	12.54	33.49	4.70	1.10	25.33	268.8	0.503
294	9.28	34.16	1.65	2.52	200	10.62	33.83	2.50	2.12	25.95	210.5	0.622
390	8.15	34.20	0.92	2.97	250	9.87	34.06	2.20	2.36	26.26	182.1	0.721
582	6.28	34.27	0.38	3.28	300	9.20	34.16	1.57	2.55	26.45	164.9	0.808
872	4.56	34.36	0.51	3.35	400	8.05	34.20	0.86	3.00	26.66	144.0	0.962
1168	3.67	34.49	0.82	3.31	500	7.02	34.24	0.52	3.19	26.84	129.8	1.098
					600	6.15	34.27	0.38	3.30	26.98	117.0	1.222
					700	5.46	34.31	0.38	3.33	27.10	106.2	1.334
					800	4.91	34.34	0.43	3.34	27.18	98.2	1.436
					1000	4.05	34.41	0.68	3.34	27.33	94.4	1.619

E See footnote page 233.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

CREST; September 13, 1949; 1353 GCT; 27°55'N, 123°07'W; sounding, missing; wind, 350°, force 3; weather, partly cloudy; sea, rough; wire angle, 6°. 1011

0	20.7	33.95E	5.36	0.39	0	20.7	33.95	5.36	0.39	23.80	411.6	0.000
10	20.07	33.96	5.26	0.38	10	20.07	33.96	5.26	0.38	23.97	395.3	0.040
25	20.03	33.91	5.29	0.43	20	20.02	33.94	5.26	0.42	23.97	395.8	0.080
50	19.00	33.87	5.54	0.38	30	19.95	33.90	5.32	0.42	23.96	397.4	0.120
75	16.00	33.71	5.86	0.37	50	19.00	33.87	5.54	0.38	24.18	377.0	0.197
100	15.53	34.16r	5.65	0.39	75	16.00	33.71	5.86	0.37	24.78	320.5	0.284
149	13.58	33.71	3.78	0.70	100	15.53	33.71	5.65	0.39	24.88	311.0	0.363
198	10.56	33.62	2.22	1.59	150	13.37	33.71	3.75	0.70	25.34	268.5	0.508
294	8.64	34.05	0.94	2.26	200	10.51	33.62	2.16	1.64	25.81	224.3	0.631
390	7.92	34.27	0.34	2.97	250	9.30	33.88	1.37	1.98	26.21	186.1	0.733
582	6.15	34.38	5.23r	3.25	300	8.57	34.07	0.87	2.31	26.48	161.8	0.821
872	4.52	34.40	0.57	3.23	400	7.84	34.28	0.34	3.01	26.75	137.0	0.969
1166	3.59	34.51	0.88	3.20	500	6.89	34.36	0.37	3.21	26.95	119.0	1.098
					600	6.01	34.38	0.44	3.24	27.08	107.2	1.211
					700	5.38	34.39	0.49	3.24	27.17	99.2	1.314
					800	4.86	34.40	0.54	3.24	27.24	93.0	1.410
					1000	4.06	34.43	0.68	3.22	27.35	83.0	1.587

CREST; September 10, 1949; 2359 GCT; 29°35'N, 116°07'W; sounding, missing; wind, 350°, force 4; weather, cloudy; sea, rough; wire angle. 30°. 1101

0	22.3	33.84E	5.02	0.51	0	22.3	33.84	5.02	0.51	23.28	461.3	0.000
9	21.68	33.82	5.00	0.54	10	21.60	33.82	5.00	0.54	23.45	444.5	0.045
22	19.97	33.71	5.23	0.55	20	20.04	33.72	5.15	0.54	23.79	412.5	0.088
44	17.61	33.64	5.75	0.54	30	19.05	33.69	5.49	0.55	24.03	390.5	0.128
65	-	33.62	5.55	0.61	50	16.91	33.63	5.72	0.55	24.50	345.8	0.202
86	13.08	33.53	5.32	0.88	75	14.17	33.58	5.45	0.70	25.07	292.0	0.282
127	18.18r	33.53	4.32	1.56	100	12.03	33.52	5.12	1.06	25.46	255.9	0.350
167	9.68	33.82	2.98	2.25	150	10.03	33.70	3.28	2.10	25.95	209.4	0.466
243	8.56	34.05	2.44	2.49	200	9.17	33.95	2.69	2.36	26.29	178.0	0.563
320	7.63	34.14	1.61	2.79	250	8.46	34.06	2.38	2.51	26.49	160.0	0.648
480	6.48	34.28	0.57	3.31	300	7.83	34.12	1.86	2.71	26.63	147.1	0.724
735	5.19	34.40	0.36	3.53	400	6.99	34.21	0.87	3.10	26.82	129.9	0.863
1120	3.79	34.49	0.76	3.49	500	6.36	34.29	0.55	3.35	26.97	116.9	0.986
					600	5.81	34.35	0.45	3.46	27.08	106.7	1.098
					700	5.34	34.39	0.37	3.52	27.17	98.8	1.201
					800	4.93	34.42	0.40	3.53	27.25	92.5	1.296
					1000	4.19	34.46	0.60	3.52	27.36	82.3	1.471

E See footnote page 233.

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

1102 CREST; September 10, 1949; 1607, 1731, 1820 GCT; 29°15'N, 116°43'W; sounding, missing; wind, 340°, force 3; weather, cloudy; sea, rough; wire angle, 22°, 20°, 20°.

0	22.3	33.77E	5.11	0.53	0	22.3	33.77	5.11	0.53	23.22	466.4	0.000
10	21.56	33.77	5.01	0.50	10	21.56	33.77	5.01	0.50	23.43	447.2	0.046
23	20.06	33.67	5.17	0.54	20	20.43	33.72	5.10	0.53	23.69	422.1	0.089
46	17.11	33.55	5.95	0.55	30	19.05	33.61	5.70	0.54	23.97	396.4	0.130
69	14.82	33.55	-	-	50	16.79	33.55	5.96	0.55	24.47	348.7	0.205
92	13.66	33.49	5.81	0.60	75	14.47	33.54	5.92	0.57	24.98	300.9	0.286
139	-	33.51	4.75	1.57	100	13.34	33.49	5.68	0.66	25.18	282.9	0.359
185	9.41	33.89	2.94	2.22	150	9.97	33.56	4.65	1.76	25.85	220.6	0.484
276	9.23	34.31	1.21	2.86	200	9.40	34.03	2.47	2.37	26.31	175.9	0.584
365	8.44	34.35	0.65	-	250	9.32	34.26	1.51	2.73	26.51	158.6	0.667
542	6.62	34.34	0.40	3.38	300	9.04	34.33	1.01	2.95	26.61	149.9	0.744
816	4.82	34.42	0.41	3.46	400	8.12	34.35	0.55	3.19	26.77	136.0	0.887
1227	3.57	34.53	0.85r	3.49	500	7.08	34.34	0.40	3.33	26.91	123.0	1.017
					600	6.06	34.36	0.40	3.40	27.06	109.1	1.133
939	4.45	34.45	0.45	3.47	700	5.33	34.38	0.40	3.44	27.17	99.3	1.237
1128	3.86	34.49[a]	0.65	3.48	800	4.89	34.41	0.41	3.46	27.24	92.5	1.333
1410	5.01r	34.58[a]	1.04	3.38	1000	4.26	34.47	0.50	3.47	27.36	82.4	1.508
					1200	3.68	34.52	0.76	3.48	27.46	73.3	1.664
1884	2.31	34.60[a]	1.72	3.23	1500	2.93	34.58	1.18	3.35	27.57	63.0	1.868
2369	1.88	34.64	2.34	3.04	2000	2.18	34.63	1.88	3.18	27.68	52.8	2.157
3357	1.69	34.64	2.78	2.95	2500	1.83	34.64	2.45	3.00	27.71	49.4	2.414
					3000	1.74	34.64	2.70	2.95	27.72	50.1	2.663

1103 CREST; September 10, 1949; 1137 GCT; 29°02'N, 117°20'W; sounding, missing; wind, 360°, force 2; weather, partly cloudy; sea, moderate; wire angle, 12°.

0	22.0	33.71E	5.15	0.54	0	22.0	33.71	5.15	0.54	23.26	462.8	0.000
10	21.08	33.71	5.19	0.55	10	21.08	33.71	5.19	0.55	23.51	439.4	0.045
24	19.80	33.64	5.27	0.52	20	20.13	33.66	5.26	0.54	23.73	418.9	0.088
49	17.60	33.60	5.65	0.51	30	19.32	33.63	5.35	0.51	23.91	401.5	0.129
73	13.86	33.48	5.90	0.59	50	17.24	33.59	5.70	0.51	24.39	356.2	0.205
98	12.59	33.49	5.40	0.90	75	13.75	33.48	5.90	0.60	25.08	290.9	0.286
147	-	33.71	5.13	1.85	100	12.51	33.50	5.40	0.94	25.35	266.2	0.355
196	9.78	34.05	2.12	2.45	150	10.78	33.73	4.93	1.92	25.85	219.4	0.476
290	8.88	34.25	1.47	-	200	9.74	34.06	2.02	2.48	26.28	179.0	0.577
382	7.93	34.32	1.27	-	250	9.21	34.19	1.57	2.80	26.47	161.9	0.661
567	6.14	34.32	0.43	3.36	300	8.78	34.26	1.45	2.99	26.60	150.9	0.739
852	4.62	34.45	0.47	-	400	7.70	34.32	1.19	3.21	26.80	132.3	0.881
1149	3.58	34.50	0.79	3.45	500	6.68	34.32	0.58	3.32	26.95	118.8	1.007
					600	5.93	34.33	0.43	3.38	27.05	109.6	1.121
					700	5.35	34.38	0.43	3.42	27.17	99.5	1.225
					800	4.86	34.43	0.45	3.44	27.26	90.8	1.320
					1000	4.06	34.48	0.57	3.45	27.39	79.3	1.490

1104 CREST; September 10, 1949; 0630 GCT; 28°49'N, 117°58'W; sounding, missing; wind, 360°, force 3; weather, cloudy; sea, rough; wire angle, 10°.

0	21.9	33,69E	5.25	0.48	0	21.9	33.69	5.25	0.48	23.27	461.7	0.000
10	21.25	33.75	5.10	0.48	10	21.25	33.75	5.10	0.48	23.50	440.8	0.045
24	20.54	33.73	5.10	0.45	20	20.75	33.73	5.08	0.46	23.62	429.6	0.089
49	13.38	33.55	6.60	0.62	30	20.05	33.72	5.48	0.45	23.79	413.0	0.131
73	10.83	33.62	3.50	1.64	50	13.36	33.55	6.60	0.68	25.22	277.8	0.200
98	10.29	33.68	2.93	2.21	75	10.78	33.62	3.45	1.67	25.76	226.2	0.263
144	-	34.00	2.23	2.43	100	10.27	33.69	2.90	2.24	25.90	213.0	0.318
186	9.18	34.07	1.74	2.59	150	9.58	34.01	2.15	2.45	26.27	179.0	0.416
185p	9.07r	34.07r	1.79r	2.54r	200	9.01	34.11	1.59	2.65	26.44	163.6	0.501
318p	7.71	34.36	0.83	3.12	250	8.43	34.25	1.19	2.88	26.64	145.4	0.578
527p	6.11	34.38	0.31	3.46	300	7.90	34.34	0.91	3.07	26.79	131.8	0.648
751p	4.91	34.43	0.38	3.49	400	7.00	34.37	0.53	3.32	26.94	118.4	0.773
					500	6.29	34.38	0.34	3.44	27.05	109.2	0.887
					600	5.69	34.39	0.31	3.48	27.13	102.1	0.992
					700	5.17	34.42	0.34	3.49	27.22	94.2	1.090

a) Value adjusted slightly to smooth out overlapping salinity curves.

E See footnote page 233.

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

CREST; September 9, 1949; 1808 GCT; 28°12'N, 118°36'W; sounding, missing; wind, 360°, force 3; weather, fog; sea, rough; wire angle, 15°. 1105

0	21.4	33.82 E	5.12	0.51	0	21.4	33.82	5.12	0.51	23.51	439.0	0.000
10	20.59	33.82	5.12	0.52	10	20.59	33.82	5.12	0.52	23.73	418.7	0.043
25	20.04	33.80	5.23	0.51	20	20.20	33.80	5.16	0.52	23.82	410.4	0.084
49	16.84	33.82	5.74	0.48	30	19.82	33.80	5.41	0.51	23.91	401.4	0.125
73	15.67	33.69	5.56	0.53	50	16.75	33.82	5.72	0.48	24.69	328.2	0.198
98	14.57	33.64	5.38	0.63	75	15.58	33.69	5.55	0.53	24.86	312.7	0.278
146	11.17	33.53	4.39	1.40	100	14.40	33.63	5.37	0.65	25.06	293.5	0.354
194	9.78	33.73	3.38	1.98	150	11.00	33.53	4.27	1.48	25.65	238.1	0.486
289	8.18	34.04	2.29	2.56	200	9.65	33.76	3.31	2.03	26.06	199.6	0.597
382	7.21	34.16	1.05	3.00	250	8.75	33.96	2.77	2.32	26.37	171.6	0.689
571	6.34	34.36	0.37	3.52	300	8.01	34.05	2.14	2.63	26.55	154.9	0.770
857	4.60	34.34	0.45	3.54	400	7.12	34.18	0.87	3.05	26.78	134.1	0.915
1146	3.66	34.43	0.76	3.55	500	6.69	34.33	0.44	3.27	26.96	118.2	1.041
					600	6.15	34.36	0.37	3.40	27.05	110.3	1.155
					700	5.46	34.35	0.38	3.48	27.13	103.5	1.262
					800	4.87	34.34	0.41	3.52	27.19	97.6	1.363
					1000	4.11	34.38	0.56	3.55	27.30	87.4	1.548

CREST; September 9, 1949; 1210 GCT; 27°41'N, 119°14'W; sounding, missing; wind, 060°, force 2; weather, low fog; sea, rough; wire angle, 4°. 1106

0	21.2	33.87E	5.11	0.45	0	21.2	33.87	5.11	0.45	23.60	430.2	0.000
10	20.64	33.87	4.94	0.46	10	20.64	33.87	4.94	0.46	23.75	416.2	0.042
25	20.51	33.87	5.11	0.45	20	20.57	33.87	5.00	0.46	23.77	414.7	0.084
50	17.73	33.73	5.50	0.49	30	20.45	33.85	5.22	0.45	23.79	413.6	0.125
75	15.48	33.72	5.65	0.47	50	17.73	33.73	5.50	0.49	24.39	356.9	0.202
99	14.64	33.64	5.70	0.50	75	15.48	33.72	5.65	0.47	24.90	308.2	0.285
149	12.38[a]	33.60	4.92	0.93	100	14.58	33.64	5.68	0.50	25.03	296.4	0.349
198	9.76	33.84	3.49	1.97	150	12.25	33.60	4.90	0.98	25.48	255.1	0.486
297	8.38	34.23	1.78	2.70	200	9.72	33.85	3.45	1.99	26.12	194.3	0.599
395	7.42	34.33	0.73	3.08	250	8.96	34.11	2.50	2.44	26.45	163.8	0.689
592	5.89	34.40	0.36	3.44	300	8.34	34.23	1.74	2.72	26.64	146.6	0.766
887	4.58	34.47	0.50	3.61	400	7.37	34.33	0.69	3.09	26.86	126.3	0.902
1182	3.63	34.56	0.80	3.54	500	6.55	34.37	0.39	3.31	27.01	113.4	1.022
					600	5.85	34.40	0.36	3.46	27.12	103.5	1.131
					700	5.34	34.43	0.38	3.55	27.20	96.0	1.230
					800	4.90	34.45	0.44	3.60	27.27	89.8	1.323
					1000	4.18	34.50	0.59	3.60	27.39	79.3	1.492

CREST; September 9, 1949; 0611 GCT; 27°20'N, 119°52'W; sounding, missing; wind, 360°, force 5; weather, drizzle; sea, very rough; wire angle, 22°. 1107

0	21.2	33.89 E	5.24	0.51	0	21.2	33.89	5.24	0.51	23.62	428.8	0.000
10	20.62	33.89	5.08	0.49	10	20.62	33.89	5.08	0.49	23.78	413.8	0.042
23	20.62	33.86	5.12	0.49	20	20.61	33.86	5.08	0.49	23.75	416.5	0.084
47	17.66	33.95	5.70	0.49	30	20.58	33.87	5.34	0.49	23.77	415.1	0.125
70	16.54	33.97	5.56	0.52	50	17.51	33.96	5.70	0.50	24.61	335.2	0.200
93	15.09	33.75	5.53	0.57	75	16.35	33.96	5.55	0.52	24.89	309.8	0.281
138	12.55	33.53	5.16	0.86	100	14.70	33.69	5.52	0.59	25.05	295.2	0.357
182	10.14	33.80	3.55	1.85	150	11.62	33.53	4.87	1.00	25.54	249.0	0.492
269	9.08	34.23	1.74	2.61	200	9.80	33.99	2.93	2.15	26.22	185.2	0.602
452	7.10	34.34	0.88	3.07	250	9.27	34.20	1.92	2.53	26.47	162.1	0.688
744	5.15	34.45	0.44	3.50	300	8.72	34.27	1.53	2.72	26.61	148.3	0.765
1227	3.62	34.60	0.87	3.48	400	7.57	34.32	1.06	2.97	26.82	130.0	0.905
					500	6.70	34.36	0.73	3.15	26.98	116.6	1.028
					600	5.99	34.39	0.53	3.32	27.10	105.9	1.139
					700	5.39	34.43	0.45	3.46	27.20	96.8	1.241
					800	4.89	34.47	0.44	3.50	27.29	88.8	1.333
					1000	4.19	34.54	0.57	3.50	27.42	76.4	1.498

a) Left thermometer reading of 12.55° rejected.

E See footnote page 233.

SIO

CCOFI
4909

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

1108 CREST; September 9, 1949; 0002 GCT; 26°58'N, 120°29'W; sounding, missing; wind, 360°, force 5; weather, overcast; sea, very rough; wire angle, 28°.

0	21.5	33.83E	5.18	0.47	0	21.5	33.83	5.18	0.47	23.49	440.9	0.000
9	20.95	33.87	5.34	0.45	10	20.94	33.87	5.32	0.45	23.67	423.8	0.043
22	20.95	33.87	5.00	0.48	20	20.94	33.87	5.01	0.48	23.67	424.2	0.086
44	19.44	33.78	5.20	0.44	30	20.87	33.84	5.02	0.46	23.67	424.9	0.128
65	15.96	33.62	5.64	0.46	50	18.35	33.75	5.30	0.44	24.25	369.9	0.208
86	14.45	33.55	5.95	0.49	75	15.15	33.58	5.90	0.47	24.87	311.8	0.293
127	12.98	33.55	5.15	0.88	100	13.99	33.55	5.87	0.55	25.09	291.1	0.368
167	10.41	33.62	4.05	1.69	150	11.24	33.58	4.52	1.40	25.65	238.7	0.500
249	8.92	34.13	2.20	2.51	200	9.63	33.80	3.22	2.08	26.10	196.4	0.609
332	8.05	34.31	0.97	2.96	250	8.91	34.14	2.18	2.52	26.48	160.8	0.699
497	6.58	34.34	0.38	3.38	300	8.37	34.29	1.35	2.82	26.68	142.4	0.774
751	5.05	34.43	0.45	3.57	400	7.40	34.32	0.57	3.19	26.85	127.6	0.909
1120	3.77	34.51	0.81	3.55	500	6.55	34.34	0.40	3.38	26.98	115.8	1.031
					600	5.87	34.38	0.40	3.49	27.10	105.1	1.142
					700	5.31	34.41	0.42	3.55	27.19	96.9	1.243
					800	4.83	34.44	0.49	3.57	27.27	89.8	1.336
					1000	4.11	34.49	0.66	3.57	27.39	79.2	1.505

1109 CREST; September 8, 1949; 1748 GCT; 26°35'N, 121°,06'W; sounding, missing; wind, 360°, force 5; weather, cloudy; sea, very rough; wire angle, 20°.

0	21.8	34.07E	5.07	0.48	0	21.8	34.07	5.07	0.48	23.59	431.5	0.000
10	21.21	34.07	5.10	0.48	10	21.21	34.07	5.10	0.48	23.75	416.5	0.042
24	21.19	34.07	5.06	0.45	20	21.20	34.07	5.06	0.46	23.75	416.5	0.084
47	18.31	34.13	5.60	0.45	30	21.11	34.07	5.32	0.44	23.78	414.5	0.126
70	17.16	34.04	5.61	0.46	50	18.10	34.13	5.61	0.45	24.60	336.7	0.201
93	16.00	33.86	5.63	0.51	75	16.99	34.00	5.63	0.47	24.77	321.1	0.283
138	15.22	33.89	5.22	0.61	100	15.86	33.86	5.62	0.53	24.92	307.0	0.362
183	10.88	33.64	4.10	1.50	150	14.69	33.85	4.92	0.72	25.18	284.6	0.509
272	8.86	34.14	2.27	2.41	200	10.13	33.68	3.66	1.72	25.92	213.4	0.634
361	7.76	34.22	-	-	250	9.18	34.05	2.63	2.24	26.37	171.7	0.730
540	6.05	34.31	0.42	3.37	300	8.48	34.18	1.87	2.61	26.58	152.1	0.811
815	4.64	34.41	0.52	3.55	400	7.33	34.24	0.96	3.08	26.80	132.6	0.954
1218	3.42	34.52	1.04	3.57	500	6.37	34.29	0.50	3.32	26.97	116.9	1.079
					600	5.68	34.34	0.42	3.43	27.09	105.8	1.190
					700	5.14	34.37	0.44	3.50	27.18	97.6	1.291
					800	4.68	34.40	0.50	3.55	27.26	90.8	1.386
					1000	3.99	34.46	0.71	3.57	27.38	79.9	1.556

1110 CREST; September 8, 1949; 1131 GCT; 26°12'N, 121°45'W; sounding, missing; wind, 340°, force 4; weather, partly cloudy; sea, very rough; wire angle, 22°.

0	21.9	34.09E	5.11	0.45	9	21.9	34.09	5.11	0.45	23.58	432.6	0.000
9	21.26	34.11	4.80	0.43	10	21.25	34.11	4.80	0.42	23.77	414.8	0.042
23	21.26	34.05	5.15	0.40	20	21.26	34.08	5.10	0.40	23.74	417.3	0.084
46	19.82	33.84u	5.32	0.43	30	21.21	33.95	5.17	0.40	23.66	425.8	0.126
68	17.27	34.05	5.60	0.45	50	19.15	33.85	5.40	0.44	24.12	382.0	0.207
91	16.04	33.73u	5.55	0.48	75	16.80	34.01	5.59	0.45	24.82	316.1	0.294
134	14.14	34.13u	-	0.69	100	15.60	33.75	5.49	0.51	24.90	309.5	0.372
179	10.90	33.65	4.15	1.54	150	12.75	34.05	4.84	1.00	25.73	231.6	0.507
269	8.70	34.09	2.50	2.37	200	10.07	33.73	3.74	1.77	25.97	208.8	0.617
359	7.79	-	1.37	-	250	8.93	34.03	2.82	2.22	26.39	169.3	0.713
541	6.23	34.34	0.44	3.45	300	8.35	34.14	2.06	2.58	26.57	153.2	0.793
818	4.70	34.47	0.52	3.65	400	7.39	34.25	1.03	3.09	26.80	132.5	0.936
1214	3.50	34.54	0.94	3.61	500	6.54	34.32	0.53	3.38	26.97	117.2	1.061
					600	5.84	34.38	0.45	3.53	27.11	104.9	1.172
					700	5.27	34.43	0.46	3.60	27.21	94.8	1.271
					800	4.77	34.47	0.51	3.64	27.30	86.8	1.362
					1000	4.04	34.51	0.68	3.65	27.41	76.9	1.526

E See footnote page 233.

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

CREST; September 8, 1949; 0354, 0541 GCT; 25°54'N, 122°18'W; sounding, missing; wind, 350°, force 4; weather, cloudy; sea, rough; wire angle, 45°, 40°. 1111

0	21.8	34.16E	5.25	0.46	0	21.8	34.16	5.25	0.46	23.66	425.0	0.000
8	21.09	34.11	5.03	0.46	10	21.08	34.12	5.01	0.46	23.82	409.5	0.042
18	21.06	34.18	4.99	0.46	20	21.05	34.18	5.00	0.46	23.88	404.7	0.082
35	20.97	34.16	5.12	0.46	30	21.01	34.17	5.06	0.46	23.88	404.7	0.123
51	19.54	34.14	5.43	0.46	50	19.90	34.14	5.42	0.46	24.15	379.4	0.201
64	17.50	34.04	5.65	0.48	75	16.70	33.96	5.61	0.48	24.81	317.6	0.288
85	16.02	33.95	5.49	0.48	100	14.80	34.03	5.45	0.48	25.29	271.6	0.362
107	-	34.07	5.43	0.50	150	11.25	33.75	4.12	1.32	25.78	226.3	0.486
165	10.72	33.71	3.82	1.62	200	9.63	33.79	3.30	1.95	26.09	197.4	0.593
332	7.83[a]	34.16	1.68	2.82	250	8.83	33.97	2.60	2.34	26.36	172.2	0.685
631	5.60	34.42	0.39	3.53	300	8.19	34.11	2.01	2.66	26.57	153.1	0.766
1074	3.92	34.54	0.72	3.62	400	7.22	34.25	1.14	3.11	26.82	130.3	0.908
					500	6.43	34.34	0.65	3.37	27.00	114.3	1.030
795	4.78	34.47	0.40	3.63	600	5.78	34.40	0.42	3.51	27.13	102.3	1.138
970	4.21	34.54	0.53	3.64	700	5.24	34.44	0.40	3.58	27.23	93.8	1.236
1238	3.38	34.57	0.76	3.65	800	4.80	34.48	0.45	3.62	27.31	86.5	1.327
1695	2.52	34.60	1.38	3.42	1000	4.12	34.52	0.65	3.62	27.41	77.2	1.490
2162	1.98	34.63	1.82	3.23	1200	3.49	34.56	0.75	3.64	27.51	68.1	1.636
3108	1.63	34.69	2.38	2.89	1500	2.85	34.59	1.15	3.52	27.60	60.5	1.829
					2000	2.12	34.62	1.68	3.29	27.68	52.2	2.110
					2500	1.82	34.65	2.04	3.10	27.73	47.9	2.361
					3000	1.66	34.68	2.32	2.93	27.76	45.4	2.594

CREST; September 5, 1949; 1004 GCT; 27°27'N, 115°23'W; sounding, missing; wind, 340°, force 3; weather, cloudy; sea, moderate; wire angle, 30°. 1201

0	21.8	33.75E	4.88		0	21.8	33.75	4.88		23.35	454.5	0.000
9	21.06	33.73	5.09		10	21.04	33.73	5.11		23.54	436.9	0.045
22	18.67	33.62	5.68		20	19.48	33.65	5.64		23.89	403.5	0.087
43	14.76	33.49	6.00		30	16.34	33.55	5.93		24.57	338.4	0.124
65	13.43	33.53	5.59		50	14.26	33.50	5.90		24.99	298.8	0.187
86	11.29	33.39	5.11		75	12.13	33.49	5.39		25.41	259.5	0.257
130	10.41	34.00	2.46		100	10.83	33.47	4.40		25.63	238.7	0.320
173	11.29	34.49	0.81		150	10.89	34.38	1.50		26.33	173.5	0.423
259	10.18	34.52	0.55		200	11.08	34.51	0.64		26.40	168.3	0.508
346	8.66	34.38	0.65		250	10.32	34.52	0.55		26.54	155.9	0.589
519	2.88r	34.40	0.50		300	9.40	34.45	0.58		26.54	146.8	0.665
787	4.98	34.43	0.34		400	8.00	34.39	0.60		26.82	131.1	0.804
1071	3.87	34.51	0.68		500	6.97	34.40	0.51		26.97	117.2	0.928
					600	6.17	34.41	0.39		27.09	106.8	1.040
					700	5.51	34.42	0.34		27.18	98.8	1.143
					800	4.94	34.43	0.35		27.26	92.0	1.238
					1000	4.12	34.49	0.55		27.39	79.3	1.410

a) Left thermometer reading of 8.00° rejected.

E See footnote page 233.

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

1202 CREST; September 5, 1949; 1509 GCT; 27°05'N, 115°53'W; sounding, missing; wind, 340°, force 4; weather, cloudy; sea, rough; wire angle, 22°.

0	22.2	33.78E	5.01	0.48	0	22.2	33.78	5.01	0.48	23.26	463.1	0.000
9	21.58	33.78	4.89	0.45	10	21.58	33.78	4.89	0.45	23.43	447.2	0.046
23	21.55	33.78	5.09	0.40	20	21.56	33.78	5.06	0.42	23.44	446.8	0.090
46	16.32	33.57	5.28	0.52	30	21.51	33.73	5.17	0.40	23.41	449.4	0.135
69	13.46	33.48	5.93	0.57	50	15.94	33.55	5.48	0.53	24.67	330.2	0.213
91	11.50	33.55	4.60	1.25	75	12.85	33.49	5.87	0.66	25.27	272.7	0.288
135	11.10	34.09	1.62	2.50	100	11.34	33.63	3.95	1.50	25.67	235.7	0.352
178	11.04	34.36	0.80	2.69	150	11.08	34.20	1.19	2.55	26.16	190.2	0.458
265	10.38	34.52	0.46	-	200	10.94	34.45	0.66	2.82	26.38	170.5	0.549
351	9.37	34.49	0.34	-	250	10.54	34,52	0.49	3.10	26.50	159.6	0.631
527	7.18	34.43	0.25	3.56	300	10.03	34.51	0.40	3.30	26.58	152.5	0.709
801	4.99	34.43	0.31	3.35	400	8.73	34.47	0.30	3.53	26.77	136.6	0.853
1082	3.90	34.51	0.66	3.32	500	7.49	34.43	0.25	2.56	26.92	122.3	0.983
					600	6.40	34.43	0.25	3.50	27.07	108.5	1.098
					700	5.62	34.43	0.27	3.42	27.17	99.5	1.202
					800	5.02	34.43	0.32	3.36	27.24	92.9	1.298
					1000	4.16	34.48	0.57	3.34	27.38	80.5	1.472

1203 CREST; September 5, 1949; 2107 GCT; 26°38'N, 116°29'W; sounding, missing; wind, 340°, force 4; weather, cloudy; sea, rough; wire angle, 10°.

0	22.0	33.77E	4.98	0.37	0	22.0	33.77	4.98	0.37	23.31	458.5	0.000
10	21.46	33.73	5.05	0.40	10	21.46	33.73	5.05	0.40	23.43	447.3	0.045
25	20.69	33.75	5.36	0.43	20	20.97	33.75	5.22	0.42	23.57	433.9	0.089
50	16.71	33.57	6.08	0.45	30	19.93	33.74	5.55	0.44	23.84	408.5	0.132
74	12.94	33.49	5.48	0.79	50	16.71	33.57	6.08	0.45	24.51	345.4	0.207
98	11.40	33.77	3.22	1.83	75	12.92	33.49	5.41	0.79	25.26	273.7	0.284
147	9.48	33.96	2.73	2.22	100	11.27	33.77	3.19	1.88	25.79	224.1	0.346
195	9.38	34.24	1.68	2.60	150	9.46	33.98	2.69	2.25	26.27	179.5	0.448
292	8.88	34.43	0.60	2.97	200	9.36	34.26	1.59	2.62	26.50	158.2	0.532
387	8.10	34.47	0.29	3.15	250	9.11	34.37	0.93	2.82	26.63	147.1	0.608
578	6.37u	34.47	0.23	3.36	300	8.83	34.44	0.57	3.00	26.73	138.5	0.680
867	4.75	34.49	0.39	3.46	400	7.97	34.47	0.29	3.17	26.88	124.7	0.811
1160	3.71	34.58	0.71	3.41	500	7.02	34.47	0.24	3.30	27.02	112.8	0.930
					600	6.23	34.47	0.24	3.37	27.13	103.4	1.038
					700	5.60	34.47	0.27	3.42	27.21	96.2	1.138
					800	5.06	34.48	0.35	3.45	27.28	89.6	1.231
					1000	4.23	34.53	0.54	3.45	27.41	77.8	1.398

1204 CREST; September 6, 1949; 0222 GCT; 26°17'N, 117°03'W; sounding, missing; wind, 340°, force 4; weather, cloudy; sea, rough; wire angle, 30°.

0	22.6	34.02 E	4.90	0.42	0	22.6	34.02	4.90	0.42	23.33	456.5	0.000
9	22.02	34.02	4.91	0.45	10	22.02	34.02	4.92	0.45	23.49	441.2	0.045
22	22.08	34.07	4.95	0.45	20	22.04	34.06	4.94	0.45	23.51	439.3	0.089
44	19.03	34.05	5.43	0.47	30	21.85	34.07	5.11	0.46	23.57	433.9	0.133
66	16.48	33.82	5.68	0.46	50	17.95	34.01	5.55	0.46	24.54	341.9	0.210
87	15.38	33.77	5.55	0.48	75	16.00	33.80	5.66	0.46	24.84	314.0	0.292
131	12.22	33.66	3.89	1.35	100	14.27	33.73	5.01	0.57	25.17	283.5	0.367
174	10.72	34.00	2.54	2.14	150	11.49	33.79	3.21	1.94	25.77	227.4	0.494
260	9.22	34.31	1.31	2.56	200	10.11	34.14	2.12	2.26	26.28	179.3	0.597
346	8.24	34.40	0.62	2.93	250	9.35	34.29	1.43	2.51	26.53	156.8	0.680
522	6.62	34.42	0.39	3.25	300	8.75	34.37	0.92	2.77	26.68	142.4	0.755
795	4.94	34.51	0.42	3.47	400	7.72	34.41	0.46	3.05	26.87	125.6	0.889
1074	3.92	34.52	0.63	3.41	500	6.82	34.42	0.39	3.22	27.01	113.7	1.008
					600	6.04	34.45	0.40	3.35	27.13	102.4	1.116
					700	5.43	34.48	0.40	3.44	27.23	93.3	1.214
					800	4.92	34.51	0.42	3.47	27.32	85.6	1.304
					1000	4.13	34.52	0.57	3.44	27.41	77.3	1.466

E See footnote page 233.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	
CREST; September 6, 1949; 0803 GCT; 25°51'N, 117°37'W; sounding, missing; wind, 350°, force 4; weather, cloudy; sea, rough; wire angle, none.													1205
0	23.7	34.47E		0.54	0	23.7	34.47		0.54	23.35	454.3	0.000	
10	23.20	34.47		0.57	10	23.20	34.47		0.57	23.50	440.8	0.045	
25	23.19	34.49		0.55	20	23.20	34.49		0.56	23.51	439.6	0.089	
49	18.66	33.89		0.58	30	23.17	34.48		0.56	23.51	440.1	0.133	
73	16.46	33.69		0.53	50	18.57	33.88		0.58	24.29	365.8	0.213	
97	14.72	33.64		0.58	75	16.33	33.68		0.53	24.68	329.9	0.300	
145	11.36	33.60		1.55	100	14.37	33.63		0.60	25.07	292.8	0.378	
192	10.06	34.05		2.32	150	11.22	33.61		1.64	25.67	236.2	0.510	
287	8.77	34.49		2.90	200	9.91	34.12		2.38	26.30	177.4	0.613	
381	7.87	34.39		3.28	250	9.20	34.42		2.69	26.65	144.8	0.694	
572	6.31	34.41		3.53	300	8.65	34.49		2.95	26.79	132.0	0.763	
860	4.77	34.49		3.59	400	7.69	34.39		3.35	26.86	126.6	0.892	
1154	3.75	34.56		3.47	500	6.83	34.40		3.51	26.99	115.3	1.013	
					600	6.12	34.42		3.54	27.10	105.6	1.124	
					700	5.54	34.44		3.57	27.19	97.7	1.225	
					800	5.05	34.47		3.58	27.27	90.2	1.319	
					1000	4.24	34.52		3.55	27.40	78.7	1.488	
CREST; September 6, 1949; 1328 GCT; 25°26'N, 118°12'W; sounding, missing; wind, 350°, force 4; weather, cloudy; sea, rough; wire angle, 17°.													1206
0	22.3	33.86E	5.04	0.46	0	22.3	33.86	5.04	0.46	23.29	459.9	0.000	
10	21.88	33.91	5.03	0.49	10	21.88	33.91	5.03	0.49	23.44	445.6	0.045	
22	21.87	33.88	5.02	0.47	20	21.87	33.89	5.02	0.47	23.44	446.5	0.090	
42	20.84	33.77	5.16	0.52	30	21.83	33.84	5.06	0.48	23.41	449.9	0.135	
61	16.05	33.64	5.75	0.47	50	17.82	33.72	5.45	0.50	24.36	359.8	0.216	
78	14.31	33.49	5.80	0.56	75	14.55	33.52	5.82	0.52	24.95	304.0	0.299	
112	12.84	33.42	5.46	0.72	100	13.37	33.43	5.65	0.65	25.12	287.8	0.373	
146	10.64	33.77	3.30	1.93	150	10.53	33.80	3.19	2.01	25.94	210.4	0.497	
214	9.65	34.13	2.06	2.51	200	9.78	34.07	2.24	2.39	26.28	178.9	0.595	
289	8.89	34.36	2.11r	3.24	250	9.27	34.28	1.59	2.87	26.53	156.2	0.678	
466	7.09	34.43	0.29	3.48	300	8.78	34.37	1.08	3.30	26.68	142.6	0.753	
746	5.16	34.45	0.33	3.65	400	7.77	34.42	0.45	3.44	26.88	125.6	0.887	
1032	4.00	34.52	0.55	3.52	500	6.80	34.43	0.29	3.51	27.02	112.6	1.006	
					600	6.02	34.44	0.29	3.60	27.13	102.8	1.114	
					700	5.40	34.45	0.35	3.65	27.21	95.1	1.213	
					800	4.89	34.46	0.36	3.64	27.28	88.9	1.304	
					1000	4.09	34.51	0.52	3.54	27.41	77.4	1.470	
CREST; September 6, 1949; 1822 GCT; 25°02'N, 118°46'W; sounding, missing; wind, 350°, force 5; weather, cloudy; sea, rough; wire angle, 24°.													1207
0	22.5	34.00E	5.04	0.43	0	22.5	34.00	5.04	0.43	23.34	455.2	0.000	
10	21.89	33.96	5.00	0.47	10	21.89	33.96	5.00	0.47	23.48	442.1	0.045	
24	21.84	34.07	5.05	0.47	20	21.84	34.06	5.03	0.47	23.57	433.8	0.089	
47	18.15	33.64	5.69	0.48	30	21.76	34.06	5.16	0.47	23.59	432.2	0.132	
68	15.99	33.73	5.85	0.44	50	17.65	33.64	5.74	0.48	24.34	361.8	0.211	
91	14.94	33.57	5.69	0.49	75	15.65	33.72	5.83	0.45	24.86	312.2	0.296	
135	12.43	33.57	4.91	1.03	100	14.52	33.56	5.60	0.53	24.98	301.3	0.372	
178	10.27	33.89	3.15	2.10	150	11.48	33.64	4.30	1.48	25.65	238.4	0.507	
264	9.58	34.38	0.86	3.01	200	10.03	34.13	2.36	2.42	26.29	178.4	0.611	
348	8.64	34.33	0.48	3.15	250	9.68	34.37	1.01	2.97	26.54	156.0	0.695	
520	6.85	34.36	0.34	3.39	300	9.22	34.35	0.66	3.08	26.59	151.4	0.772	
789	5.09	34.42	0.34	3.64	400	8.02	34.34	0.38	3.22	26.77	135.3	0.915	
1071	3.92	34.52	0.60	3.58	500	7.03	34.36	0.35	3.35	26.93	121.0	1.043	
					600	6.23	34.38	0.35	3.52	27.06	110.1	1.159	
					700	5.58	34.40	0.35	3.61	27.15	101.0	1.265	
					800	5.02	34.42	0.35	3.64	27.24	93.6	1.362	
					1000	4.17	34.50	0.51	3.61	27.39	79.1	1.534	

E See footnote page 233.

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

1208 CREST; September 6, 1949; 2331 GCT; 24°41'N, 119°21'W; sounding, missing; wind, 350°, force 4; weather, cloudy; sea, rough; wire angle, 22°.

0	24.2	34.60E	4.86	0.51	0	24.2	34.60	4.86	0.51	23.30	459.1	0.000
10	23.43	34.60	4.77	0.50	10	23.43	34.60	4.77	0.50	23.52	438.0	0.044
23	23.39	34.54	4.80	0.52	20	23.40	34.54	4.79	0.52	23.49	441.6	0.088
46	23.34	34.54	4.75	0.48	30	23.36	34.54	4.81	0.51	23.50	440.9	0.132
68	19.87	34.14	5.44	0.53	50	23.29	34.53	4.85	0.48	23.51	440.5	0.221
90	15.62	33.95	4.15	1.18	75	18.35	34.05	5.36	0.60	24.48	349.1	0.319
135	11.62	33.82	3.00	2.00	100	14.32	33.90	3.88	1.42	25.29	272.3	0.397
179	10.99	34.20	1.88	2.38	150	11.37	33.96	2.54	2.14	25.92	212.7	0.518
269	9.38	34.31	0.92	2.92	200	10.60	34.23	1.57	2.53	26.27	180.8	0.616
360	8.52	34.36	0.38	3.21	250	9.70	34.30	1.08	2.83	26.48	161.7	0.702
545	6.49	34.34	0.37	3.43	300	9.08	34.34	0.69	3.05	26.61	149.5	0.780
826	4.87	34.36	0.45	3.46	400	8.03	34.36	0.39	3.29	26.79	133.9	0.922
1111	3.90	34.52	0.64	3.50	500	6.90	34.35	0.37	3.41	26.94	119.9	1.049
					600	6.09	34.34	0.40	3.45	27.04	110.9	1.164
					700	5.50	34.35	0.42	3.46	27.12	103.7	1.271
					800	4.99	34.36	0.45	3.46	27.19	97.4	1.372
					1000	4.22	34.46	0.55	3.48	27.36	82.8	1.552

1209 CREST; September 7, 1949; 0509 GCT; 24°15'N, 119°56'W; sounding, missing; wind, 360°, force 4; weather, cloudy; sea, very rough; wire angle, 30°.

0	22.9	34.21E	5.10	0.41	0	22.9	34.21	5.10	0.41	23.38	451.0	0.000
8	22.25	34.16	5.07	0.41	10	22.25	34.16	5.05	0.42	23.53	437.7	0.044
21	22.25	34.21	5.02	0.43	20	22.25	34.21	5.02	0.43	23.57	434.1	0.088
43	18.40	33.97	5.77	0.42	30	21.60	34.18	5.45	0.43	23.73	419.4	0.131
65	16.95	33.93	5.73	0.41	50	17.83	33.96	5.76	0.41	24.54	342.6	0.207
86	16.04	33.87	5.25	0.43	75	16.53	33.90	5.48	0.41	24.80	318.2	0.290
130	13.64	33.60	4.47	0.84	100	15.46	33.75	5.00	0.50	24.93	306.4	0.368
174	10.88	33.80	3.38	1.79	150	12.02	33.62	3.97	1.28	25.53	249.6	0.506
261	9.06	34.23	1.88	2.55	200	10.07	34.01	2.80	2.07	26.19	188.2	0.616
524	6.62	34.42	0.31	3.30	250	9.18	34.21	2.00	2.47	26.49	159.8	0.703
798	5.06	34.49	0.41	3.48	300	8.62	34.28	1.50	2.78	26.63	147.2	0.779
1078	3.99	34.49	0.73	3.48	400	7.62	34.36	0.75	3.09	26.85	128.0	0.917
					500	6.82	34.41	0.34	3.27	27.00	114.4	1.038
					600	6.12	34.44	0.35	3.38	27.12	104.2	1.148
					700	5.53	34.47	0.40	3.44	27.21	95.7	1.248
					800	5.05	34.49	0.43	3.48	27.29	88.8	1.340
					1000	4.26	34.49	0.61	3.48	27.38	80.9	1.509

1210 CREST; September 7, 1949; 1028 GCT; 23°50'N, 120°30'W; sounding, missing; wind, 350°, force 3; weather, cloudy; sea, rough; wire angle, 10°.

0	23.0	34.27E	4.99	0.40	0	23.0	34.27	4.99	0.40	23.40	449.2	0.000
10	22.37	34.31	4.95	0.41	10	22.37	34.31	4.95	0.41	23.61	429.8	0.044
25	22.41	34.25	4.94	0.36	20	22.39	34.25	4.93	0.38	23.56	434.9	0.087
50	19.10	34.07	5.66	0.36	30	22.35	34.25	5.05	0.36	23.57	434.3	0.131
74	16.72	33.92	5.81	0.36	50	19.10	34.07	5.66	0.36	24.30	364.8	0.211
98	15.75	33.86	5.51	1.17	75	16.70	33.92	5.81	0.38	24.78	320.4	0.296
147	12.08	33.62	4.49	0.47r	100	15.63	33.85	5.48	1.19	24.97	303.0	0.374
196	10.00	33.84	3.38	1.89	150	11.77	33.62	4.43	1.49	25.58	245.0	0.511
294	8.60	34.26	1.60	2.57	200	9.93	33.88	3.32	1.92	26.11	195.3	0.621
391	7.58	34.32	0.72	3.04	250	9.12	34.17	2.26	2.30	26.47	161.8	0.711
586	6.15	34.45	0.26	3.40	300	8.52	34.26	1.52	2.61	26.63	147.0	0.788
878	4.59	34.49	0.57	3.49	400	7.50	34.32	0.68	3.07	26.84	129.0	0.926
1171	3.66	34.54	0.91	3.40	500	6.71	34.39	0.35	3.30	27.00	114.3	1.047
					600	6.06	34.46	0.29	3.41	27.14	101.9	1.155
					700	5.43	34.48	0.40	3.47	27.23	93.3	1.253
					800	4.92	34.49	0.50	3.49	27.30	87.2	1.343
					1000	4.14	34.51	0.68	3.47	27.40	78.1	1.508

E See footnote page 233.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

BLACK DOUGLAS; October 16, 1949; 2027 GCT; 46°15'N, 131°30'W; sounding, 2,200 fm; wind, 320°, force 4; weather, overcast; sea, high; wire angle, 24°. 108

0	13.1	32.59E	5.92	0.86	0	13.1	32.59	5.92	0.86	24.53	340.7	0.000
9	13.03	32.61	6.11	0.83	10	13.04	32.61	6.10	0.84	24.55	339.4	0.034
23	13.05	32.57	5.96	0.80	20	13.05	32.58	6.02	0.80	24.53	341.9	0.068
46	9.37	32.63	6.17	1.07	30	13.03	32.58	5.95	0.81	24.53	341.9	0.102
69	7.28	32.68	6.21	1.22	50	8.90	32.64	6.18	1.10	25.30	268.4	0.163
92	6.68	32.72	6.20	1.39	75	6.98	32.69	6.22	1.26	25.62	238.4	0.227
138	6.59	33.27	4.82	1.77	100	6.66	32.75	6.14	1.46	25.72	230.0	0.285
184	6.47	33.77	3.99	1.94	150	6.57	33.46	4.50	1.84	26.29	176.4	0.387
277	5.85	33.75	3.18	2.05	200	6.40	33.77	3.85	1.96	26.55	151.8	0.469
369	5.15	33.87	2.45	2.50	250	6.06	33.75	3.43	2.01	26.58	149.8	0.544
554	6.49r	34.05	1.22	2.83	300	5.65	33.78	3.00	2.12	26.65	143.2	0.617
835	3.64	34.27	0.50	3.28	400	4.96	33.90	2.20	2.58	26.83	127.1	0.752
1174	3.41	34.40	0.43	3.26	500	4.48	34.00	1.52	2.75	26.96	115.2	0.874
					600	4.14	34.10	1.00	2.92	27.08	104.8	0.984
					700	3.89	34.23	0.70	3.11	27.21	93.1	1.083
					800	3.69	34.35	0.55	3.26	27.32	82.9	1.170
					1000	3.46	34.39	0.44	3.28	27.38	78.8	1.332

BLACK DOUGLAS; October 16, 1949; 1351 GCT; 46°15'N, 132°27'W; sounding, 2,000 fm; wind, 320°, force 3; weather, intermittent rain squally, sea, rough; wire angle, 20°. 109

0	13.4	32.59E	5.95	0.80	0	13.4	32.59	5.95	0.80	24.47	346.5	0.000
9	13.40	32.65	5.85	0.78	10	13.40	32.65	5.84	0.78	24.51	343.2	0.035
23	13.45	32.48	5.62	0.80	20	13.44	32.48	5.63	0.80	24.38	356.8	0.070
46	13.43	32.66	5.86	0.78	30	13.46	32.52	5.64	0.80	24.41	354.3	0.105
69	8.62	32.57	6.28	1.07	50	13.48	32.66	5.95	0.79	24.50	345.0	0.175
94	13.37r	32.59	5.85	0.87	75	8.37	32.57	6.25	1.06	25.33	266.3	0.251
140	6.93	32.97	5.60	1.46	100	7.50	32.61	5.82	0.87	25.49	251.5	0.316
187	6.76	33.46	4.59	1.81	150	6.89	33.09	5.50	1.56	25.95	208.2	0.431
280	5.81	33.55	3.72	1.88	200	6.70	33.48	4.38	1.84	26.29	177.4	0.528
372	5.14	33.86	2.52	2.44	250	6.16	33.53	3.94	1.87	26.39	167.6	0.613
555	4.25	34.07	1.24	3.03	300	5.62	33.60	3.55	1.91	26.51	156.4	0.695
836	3.79	34.31	0.51	3.24	400	4.96	33.92	2.23	2.64	26.85	125.7	0.835
1175	3.38	34.27r	0.42	3.34	500	4.43	34.02	1.54	2.96	26.99	113.1	0.955
					600	4.14	34.11	1.04	3.08	27.09	104.1	1.064
					700	3.96	34.20	0.73	3.16	27.17	97.0	1.164
					800	3.84	34.29	0.56	3.22	27.26	89.5	1.257
					1000	3.55	(34.34)	0.45	3.29	(27.33)	(83.7)	(1.431)

E Evaporation of all salinity samples occurred on Cruise 4910 on stations 108 through 461. Estimated average corrections to values given here can be made by subtracting 0.052 ‰ from the value of S, 0.040 from σ_t and by adding 3.9 to $10^5 \delta$ at all depths; to ΔD add 0.004 for each 100 meter depth increment.

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

110 BLACK DOUGLAS; October 16, 1949; 0556, 0219 GCT; 46°15'N, 133°24'W; sounding, 2,100 fm; wind, 300°, force 4; weather, overcast; sea, high; wire angle, 35°, 32°.

0	13.6	32.54E	5.80	0.72	0	13.6	32.54	5.80	0.72	24.39	355.0	0.000
9	13.58	32.54	5.54	0.74	10	13.58	32.54	5.55	0.74	24.39	354.9	0.036
21	13.61	32.54	5.75	0.71	20	13.59	32.54	5.75	0.71	24.39	355.3	0.071
46	13.60	32.65	5.53	0.75	30	13.63	32.56	5.69	0.71	24.39	354.7	0.107
63	9.53	32.74	5.94	0.99	50	13.56	32.68	5.54	0.79	24.51	345.2	0.177
93	7.59	32.65	5.70	0.86	75	8.48	32.73	5.81	0.93	25.45	255.8	0.252
124	6.80	32.75	5.74	1.40	100	7.34	32.66	5.70	0.91	25.55	245.8	0.314
166	7.00	33.57	4.18	1.90	150	6.92	33.37	4.75	1.75	26.17	188.0	0.423
250	6.46	33.98	2.66	2.38	200	6.90	33.76	3.35	2.15	26.48	159.3	0.510
334	5.78	33.98	2.00	2.64	250	6.46	33.98	2.66	2.38	26.71	137.7	0.583
504	4.82	34.09	0.96	3.08	300	6.02	33.98	2.24	2.54	26.76	133.0	0.652
771	3.92	34.33	0.44	3.20	400	5.38	34.01	1.53	2.85	26.87	124.0	0.780
					500	4.86	34.09	1.00	3.07	26.99	112.8	0.899
896	3.57	34.33	0.30	3.18	600	4.44	34.20	0.70	3.15	27.13	100.9	1.005
1079	3.23	34.42u	0.43	3.18	700	4.11	34.29	0.51	3.18	27.23	91.1	1.101
1357	2.74	33.28r	4.07r	1.66r	800	3.83	34.33	0.40	3.20	27.29	86.1	1.190
1826	2.09	34.25r	1.08	2.98	1000	3.36	34.39	0.40	3.23	27.39	77.6	1.353
2300	1.82	34.43u	0.56r	3.23r	1200	3.01	34.43	0.66	3.16			
					1500	2.52	34.44	0.98	3.06			
					2000	1.95	34.44					
					2500	(1.81)	(34.44)					

201 BLACK DOUGLAS; October 12, 1949; 1032 GCT; 44°22'N, 125°10'W; sounding, 980 fm; wind, 300°, force 2; weather, partly cloudy; sea, very high; wire angle, 5°.

0	13.4	32.00E	5.56	0.53	0	13.4	32.00	5.56	0.53	24.01	391.1	0.000
10	13.32	32.01	5.53	0.52	10	13.32	32.01	5.53	0.52	24.04	388.3	0.039
24	9.53	32.45	5.15	1.09	20	10.00	32.11	5.24	0.66	24.72	323.8	0.075
48	8.03	32.83	4.85	1.48	30	8.95	32.60	5.05	1.24	25.26	271.8	0.104
80	7.88	33.49	3.81	1.88	50	8.00	32.87	4.80	1.53	25.62	238.4	0.155
97	7.86	33.68	2.51	2.32	75	7.89	33.52	3.66	1.89	26.15	188.7	0.209
146	7.78	33.84	2.04	2.26	100	7.86	33.69	2.47	2.33	26.29	176.1	0.254
196	7.56	33.86	1.73	2.46	150	7.76	33.85	2.00	2.26	26.43	163.4	0.339
294	6.81	33.93	1.89	2.56	200	7.54	33.86	1.75	2.47	26.47	160.5	0.421
392	5.99	34.02	1.14	2.72	250	7.23	33.90	1.88	2.52	26.54	154.0	0.499
588	4.97	34.11	0.62	3.00	300	6.77	33.94	1.85	2.57	26.64	145.5	0.573
884	3.89	34.22	0.36	3.18	400	5.94	34.02	1.12	2.73	26.81	130.2	0.711
1231	3.02	34.36	0.71	3.04	500	5.42	34.07	0.86	2.88	26.91	121.3	0.837
					600	4.90	34.12	0.60	3.01	27.01	112.2	0.954
					700	4.46	34.16	0.44	3.10	27.09	104.9	1.063
					800	4.13	34.19	0.37	3.18	27.15	99.8	1.165
					1000	3.58	34.28	0.43	3.16	27.28	88.6	1.353

E See footnote page 249.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

BLACK DOUGLAS; October 12, 1949; 1658 GCT; 44°20'N, 125°50'W; sounding, 1,600 fm; wind, 340°, force 3; weather, partly cloudy; sea, high; wire angle, 20°. 202

0	14.31	-	5.65	0.38	0	14.31	(32.04)	5.65	0.38	(23.86)	(405.1)	0.000
9	14.40	32.07E	5.94	0.38	10	14.40	32.07	5.93	0.39	23.87	405.4	0.041
22	13.89	32.14	5.70	0.52	20	14.25	32.14	5.74	0.48	23.95	397.3	0.081
45	8.11	32.84	4.98	1.48	30	10.30	32.28	5.42	0.70	24.81	316.3	0.116
70	8.27	33.49	4.06	1.88	50	8.10	33.02	4.80	1.67	25.73	228.6	0.171
93	7.87	33.64	3.47	2.04	75	8.27	33.55	3.83	1.92	26.12	192.0	0.223
140	7.59	33.82	2.34	2.28	100	7.79	33.69	3.29	2.09	26.30	175.0	0.269
187	-	33.89	2.77	2.18	150	7.50	33.85	2.55	2.22	26.47	159.9	0.353
277	-	-	1.41	2.62	200	7.15	33.92	2.67	2.27	26.57	150.6	0.431
365	5.89	34.14	0.99	2.76	250	6.75	33.99	1.72	2.55	26.68	140.7	0.503
536	5.02	34.22	0.65	2.94	300	6.36	34.07	1.17	2.67	26.80	130.5	0.571
808	4.12	34.31	0.36	3.08	400	5.70	34.17	0.87	2.82	26.96	116.1	0.694
1143	3.24	-	0.48	2.89	500	5.18	34.21	0.69	2.92	27.05	107.8	0.806
					600	4.75	34.25	0.50	3.00	27.13	100.8	0.911
					700	4.45	34.28	0.40	3.06	27.19	95.8	1.009
					800	4.15	34.31	0.35	3.08	27.24	91.1	1.103
					1000	3.60	(34.37)	0.38	2.99	(27.35)	(82.0)	(1.276)

BLACK DOUGLAS; October 12, 1949; 2345 GCT; 44°17'N, 126°46'W; sounding, 1,600 fm; wind, 360°, force 3; weather, cloudy; sea, high; wire angle, 7°. 203

0	14.8	31.82E	5.60	0.37	0	14.8	31.82	5.60	0.37	23.58	431.5	0.000
10	14.57	31.83	5.76	0.38	10	14.57	31.83	5.76	0.38	23.63	426.3	0.043
25	14.58	31.83	5.64	0.38	20	14.58	31.83	5.67	0.38	23.63	426.8	0.086
49	13.87	32.56	5.94	0.92	30	14.56	31.84	5.68	0.39	23.65	425.6	0.128
74	7.67	32.81	5.29	1.38	50	13.80	32.57	5.93	0.97	24.37	357.7	0.207
98	7.39	33.24	4.47	1.74	75	7.65	32.83	5.20	1.47	25.64	236.7	0.281
148	7.58	33.78	2.78	2.11	100	7.38	33.28	4.27	1.75	26.03	199.9	0.335
101p	-	33.89r	2.56r	2.28r	150	7.57	33.78	2.75	2.13	26.40	166.1	0.427
198	7.13	33.78	2.18	2.21	200	7.09	33.78	2.51	2.29	26.47	160.2	0.508
296	6.13	34.00	1.42	2.64	250	6.55	33.87	2.37	2.33	26.61	147.0	0.585
488	5.13	34.18	0.80	2.89	300	6.09	34.01	2.15	2.37	26.78	131.5	0.655
801	4.05	34.33	0.34	3.10	400	5.54	34.12	1.37	2.66	26.94	117.7	0.780
1130	3.40	34.07r	-	-	500	5.08	34.19	0.74	2.92	27.05	108.2	0.892
					600	4.61	34.26	0.43	3.04	27.16	98.4	0.996
					700	4.29	34.30	0.33	3.08	27.22	92.6	1.091
					800	4.05	34.33	0.34	3.10	27.27	88.5	1.182
					1000	3.64	(34.40)	-	-	(27.37)	(80.3)	(1.350)

BLACK DOUGLAS; October 13, 1949; 0749 GCT; 44°14'N, 127°42'W; sounding, 1,590 fm; wind, 360°, force 3; weather, cloudy; sea, very rough; wire angle, 18°. 204

0	15.5	32.10E	5.32	0.46	0	15.5	32.10	5.32	0.46	23.66	424.3	0.000
9	15.42	32.20	5.30	0.52	10	15.42	32.20	5.25	0.52	23.75	416.6	0.042
22	15.41	32.18	5.14	0.50	20	15.41	32.18	5.13	0.51	23.74	418.0	0.084
45	12.91	32.48	6.27	0.64	30	15.39	32.26	5.17	0.51	23.80	412.1	0.125
81	7.41	32.68	5.95	1.30	50	11.60	32.54	6.24	0.69	24.77	319.2	0.198
89	7.46	32.79	5.40	1.56	75	7.90	32.72	5.79	1.38	25.52	248.5	0.269
132	6.83	33.44	4.92	1.80	100	7.20	32.93	5.25	1.62	25.79	223.6	0.328
174	7.09	33.87	3.22	2.26	150	6.90	33.64	3.90	1.93	26.38	167.5	0.426
255	6.26	33.96	2.48	2.54	200	6.96	33.91	2.93	2.39	26.59	148.8	0.505
337	5.60	34.00	1.60	2.86	250	6.33	33.96	2.51	2.53	26.71	137.6	0.576
500	4.83	34.07	0.72	3.16	300	5.86	33.99	1.99	2.71	26.80	130.1	0.644
757	4.02	34.31	0.30	3.31	400	5.26	34.02	1.14	3.00	26.89	121.7	0.769
1084	3.28	34.42	0.41	3.14	500	4.83	34.07	0.72	3.16	26.98	114.0	0.887
					600	4.45	34.15	0.45	3.27	27.09	104.6	0.997
					700	4.15	34.26	0.32	3.30	27.21	93.8	1.096
					800	3.90	34.34	0.28	3.30	27.29	86.1	1.186
					1000	3.45	34.41	0.34	3.20	27.39	77.3	1.349

E See footnote page 249.

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
205	BLACK DOUGLAS; October 13, 1949; 1411 GCT; 44°12'N, 128°37'W; sounding, 1,500 fm; wind, 340°, force 2; weather, partly cloudy; sea, rough; wire angle, 0°.											
0	15.2	32.54E	5.70	0.52	0	15.2	32.54	5.70	0.52	24.06	386.6	0.000
10	15.02	32.54	5.50	0.57	10	15.02	32.54	5.50	0.57	24.10	383.2	0.038
25	15.06	32.55	5.54	0.56	20	15.05	32.54	5.52	0.56	24.09	384.3	0.077
49	12.07	32.72	6.13	0.94	30	15.05	32.56	5.57	0.60	24.10	383.1	0.115
74	8.55	32.75	5.89	1.13	50	13.75	32.73	6.12	0.96	24.51	345.1	0.188
98	7.89	32.74	5.93	1.32	75	8.50	32.75	5.89	1.16	25.46	254.8	0.263
148	7.23	33.10	5.21	1.56	100	7.81	32.74	5.94	1.33	25.55	246.2	0.326
196	6.96	33.68	4.41	1.86	150	7.20	33.13	5.08	1.56	25.94	209.5	0.440
294	6.15	33.91	3.36	2.15	200	6.93	33.70	4.38	1.87	26.43	164.2	0.533
390	5.47	34.02	1.82	2.74	250	6.55	33.83	3.90	2.00	26.58	150.1	0.611
580	4.47	34.20	0.65	3.13	300	6.10	33.92	3.28	2.19	26.71	138.2	0.684
868	3.82	34.40	0.40	3.30	400	5.38	34.03	1.69	2.78	26.88	122.5	0.814
1213	3.07	34.54	0.47	3.26	500	4.79	34.13	0.89	3.02	27.03	109.0	0.930
					600	4.40	34.22	0.61	3.16	27.15	98.9	1.034
					700	4.14	34.29	0.49	3.24	27.23	91.6	1.129
					800	3.93	34.36	0.41	3.28	27.31	84.9	1.217
					1000	3.52	34.47	0.40	3.30	27.43	73.8	1.376
206	BLACK DOUGLAS; October 13, 1949; 2213 GCT; 44°09'N, 129°33'W; sounding, 1,580 fm; wind, 340°, force 2; weather, partly cloudy; sea, very rough; wire angle, 25°.											
0	15.44	32.74E	5.89	0.49	0	15.44	32.74	5.89	0.49	24.16	377.3	0.000
9	15.42	32.74	5.67	0.48	10	15.40	32.74	5.67	0.48	24.17	376.8	0.038
23	15.40	32.74	5.68	0.49	20	15.40	32.74	5.67	0.49	24.17	376.8	0.075
45	15.36	32.74	5.57	0.48	30	15.38	32.74	5.68	0.50	24.17	376.8	0.113
77	9.35	32.72	6.49	0.94	50	15.35	32.74	5.84	0.48	24.18	376.6	0.188
90	8.62	32.73	6.34	1.18	75	9.55	32.72	6.48	1.04	25.27	272.8	0.270
134	7.66	33.04	5.56	1.46	100	8.23	32.76	6.19	1.24	25.50	250.7	0.335
177	-	33.56	4.44	1.94	150	7.48	33.24	5.11	1.75	25.99	205.0	0.448
262	6.64	33.93	3.28	2.37	200	7.07	33.70	4.09	2.06	26.41	166.0	0.542
345	5.76	34.03	2.29	2.78	250	6.75	33.90	3.40	2.31	26.61	147.5	0.620
514	4.95	34.14	0.83	3.32	300	6.25	33.99	2.80	2.56	26.75	135.0	0.691
773	4.11	33.94r	3.30r	2.32r	400	5.43	34.07	1.58	3.04	26.91	120.2	0.818
1099	3.34	34.46	0.44	3.50	500	5.00	34.13	0.88	3.29	27.01	111.6	0.934
					600	4.61	34.20	0.65	3.43	27.11	102.8	1.042
					700	4.32	34.28	0.55	3.48	27.20	94.5	1.140
					800	4.05	34.35	0.52	3.49	27.29	87.0	1.231
					1000	3.56	34.44	0.45	3.50	27.41	76.4	1.394
207	BLACK DOUGLAS; October 14, 1949; 0420 GCT; 44°06'N, 130°29'W; sounding, 1,780 fm; wind, 320°, force 1; weather, clear; sea, rough; wire angle, 0°.											
0	15.9	32.71E	5.52	0.52	0	15.9	32.71	5.52	0.52	24.03	389.2	0.000
10	15.89	32.71	5.56	0.54	10	15.89	32.71	5.56	0.54	24.03	389.5	0.039
25	15.89	32.71	5.55	0.53	20	15.90	32.71	5.56	0.54	24.03	389.7	0.078
50	15.86	32.72	5.44	0.52	30	15.90	32.71	5.53	0.53	24.03	390.2	0.117
75	9.75	32.75	6.26	0.97	50	15.86	32.72	5.44	0.52	24.05	388.7	0.195
100	8.25	32.73	5.95	1.15	75	9.75	32.75	6.26	0.97	25.26	273.7	0.280
150	7.87	33.24	4.60	1.62	100	8.25	32.73	5.95	1.15	25.48	253.0	0.347
200	-	33.76	3.07	2.11	150	7.87	33.24	4.60	1.62	25.93	211.2	0.463
300	6.34	33.96	2.91	2.38	200	7.42	33.76	3.07	2.11	26.41	166.2	0.558
400	5.56	34.00	1.87	2.77	250	6.85	33.90	3.05	2.23	26.60	148.8	0.636
600	-	34.17	0.70	3.26	300	6.34	33.96	2.91	2.38	26.71	138.5	0.709
1022	3.55	34.51	0.46	3.42	400	5.56	34.00	1.87	2.77	26.84	126.9	0.840
					500	5.04	34.07	1.25	3.09	26.96	116.5	0.962
					600	4.63	34.17	0.70	3.26	27.08	105.2	1.073
					700	4.34	34.25	0.47	3.37	27.18	96.9	1.174
					800	4.07	34.34	0.40	3.40	27.28	87.8	1.266
					1000	3.60	34.49	0.45	3.42	27.44	73.2	1.428

E See footnote page 249.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

BLACK DOUGLAS; October 14, 1949; 1214 GCT; 44°03'N, 131°24'W; sounding, 1,980 fm; wind, 260°, force 1; weather, partly cloudy; sea, moderate; wire angle, 14°. 208

0	15.4	32.72E	5.91	0.65	0	15.4	32.72	5.91	0.65	24.15	378.0	0.000
9	15.24	32.74	5.86	0.58	10	15.25	32.74	5.87	0.58	24.20	373.5	0.038
23	15.24	32.74	5.86	0.62	20	15.23	32.74	5.88	0.62	24.20	373.3	0.075
47	15.25	32.75	5.86	0.61	30	15.24	32.74	5.89	0.62	24.20	373.8	0.112
71	8.93	32.72	6.35	1.18	50	15.25	32.75	5.92	0.62	24.20	373.8	0.187
96	8.06	32.77	6.46	1.34	75	8.75	32.72	6.41	1.20	25.39	260.6	0.266
144	6.99	32.99	5.88	1.60	100	7.70	32.79	6.43	1.36	25.61	240.7	0.329
192	-	33.62	4.94	1.82	150	6.95	33.04	5.77	1.64	25.90	212.7	0.443
287	6.18	33.92	3.70	2.31	200	6.70	33.67	4.85	1.84	26.43	163.3	0.536
382	5.24	33.98	2.26	2.85	250	6.43	33.85	4.26	2.07	26.61	147.1	0.614
573	4.20	34.16	0.63	3.41	300	6.07	33.93	3.48	2.39	26.72	137.2	0.685
859	-	34.36	0.30	3.56	400	5.07	33.99	2.05	2.96	26.89	121.7	0.814
1196	2.98	34.44	0.44	3.54	500	4.49	34.08	1.09	3.28	27.03	109.2	0.930
					600	4.10	34.19	0.55	3.45	27.16	97.7	1.034
					700	3.83	34.27	0.35	3.54	27.25	88.8	1.127
					800	3.61	34.33	0.30	3.56	27.31	83.6	1.213
					1000	3.24	34.42	0.37	3.55	27.42	74.2	1.370

BLACK DOUGLAS; October 14, 1949; 1947 GCT; 44°02'N, 132°20'W; sounding, 1,990 fm; wind, 140°, force 3; weather, overcast; sea, very rough; wire angle, 20°. 209

0	15.7	32.61E	6.01	0.66	0	15.7	32.61	6.01	0.66	24.00	392.6	0.000
10	15.52	32.61	5.54	0.66	10	15.52	32.61	5.54	0.66	24.04	388.6	0.039
25	15.51	32.63	5.42	0.63	20	15.51	32.63	5.43	0.64	24.06	387.2	0.078
48	14.68	32.63	5.43	0.71	30	15.52	32.63	5.38	0.63	24.06	387.6	0.117
80	8.65	32.68	5.80	1.22	50	14.50	32.63	5.47	0.72	24.27	367.2	0.192
96	7.89	32.68	5.65	1.40	75	9.10	32.68	5.80	0.90	25.31	268.8	0.272
144	6.91	32.95	5.43	1.56	100	7.76	32.69	5.60	1.21	25.51	248.9	0.336
190	6.78	33.40	4.67	1.75	150	6.90	33.00	5.33	1.59	25.88	215.2	0.452
284	6.08	33.78	3.56	2.26	200	6.74	33.47	4.55	1.81	26.27	178.7	0.551
378	5.18	33.77	2.70	2.54	250	6.40	33.73	3.95	2.09	26.52	155.6	0.634
567	4.17	34.04	0.99	3.24	300	5.88	33.78	3.39	2.30	26.63	146.0	0.710
850	-	34.31	0.37	3.50	400	5.00	33.78	2.50	2.66	26.73	136.5	0.851
1188	2.94	34.43	0.46	3.52	500	4.44	33.89	1.43	3.05	26.88	122.9	0.980
					600	4.06	34.10	0.84	3.30	27.09	104.0	1.094
					700	3.80	34.21	0.55	3.42	27.20	93.7	1.193
					800	3.58	34.28	0.38	3.50	27.28	86.8	1.283
					1000	3.23	34.37	0.38	3.51	27.38	77.8	1.448

BLACK DOUGLAS; October 15, 1949; 0358 GCT; 43°58'N, 133°15'W; sounding, 2,000 fm; wind, 290°, force 4; weather, drizzle; sea, very rough; wire angle, 33°. 210

0	15.4	-	5.61	0.66	0	15.4	(32.65)	5.61	0.66	(24.09)	(383.2)	0.000
8	15.44	32.65E	5.84	0.64	10	15.45	32.65	5.82	0.64	24.08	384.4	0.038
21	15.47	32.63	5.70	0.62	20	15.47	32.64	5.73	0.62	24.06	385.6	0.077
42	15.34	32.56	5.60	0.65	30	15.44	32.60	5.65	0.62	24.04	388.2	0.116
79	8.74	32.66	6.30	1.02	50	14.95	32.57	5.69	0.76	24.13	380.8	0.193
83	8.48	32.63	5.74	1.14	75	9.15	32.65	5.80	0.98	25.27	271.7	0.274
124	7.57	32.72	6.21	1.31	100	7.98	32.64	5.97	1.20	25.44	255.6	0.340
164	6.76	33.12	5.68	1.60	150	7.06	32.98	5.92	1.49	25.84	218.7	0.458
246	-	-	4.34	1.91	200	6.35	33.36	5.11	1.74	26.24	181.8	0.559
327	5.46	33.73	3.06	2.41	250	6.03	33.54	4.26	1.93	26.42	165.2	0.645
492	4.40	34.00	1.46	2.98	300	5.68	33.67	3.38	2.22	26.56	151.8	0.724
748	3.78	34.11	0.51	3.24	400	4.89	33.88	2.30	2.75	26.82	127.7	0.864
1066	3.55	-	0.45	3.30	500	4.37	34.00	1.41	2.98	26.98	113.9	0.985
					600	4.05	34.05	0.85	3.13	27.05	107.6	1.096
					700	3.85	34.09	0.60	3.22	27.10	103.2	1.201
					800	3.74	(34.14)	0.49	3.26	(27.14)	(99.9)	(1.303)
					1000	3.58	(34.24)	0.45	3.30	(27.25)	(91.4)	(1.494)

E See footnote page 249.

SIO

CCOFI
4910

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
301	BLACK DOUGLAS; October 11, 1949; 1853, 1530 GCT; 42°38'N, 125°19'W; sounding, 1,680 fm; wind, 220°, force 2; weather, overcast; sea, very rough; wire angle, 25°, 13°.											
0	15.0	31.98E	5.64	0.41	0	15.0	31.98	5.64	0.41	23.66	423.3	0.000
9	14.92	31.98	5.95	0.38	10	14.92	31.98	5.98	0.38	23.68	422.3	0.042
22	13.31	32.36	6.13	0.56	20	13.75	32.26	6.12	0.50	23.94	378.5	0.082
44	10.13	33.31	5.35	1.39	30	12.01	32.90	6.10	1.08	24.98	299.7	0.116
65	-	33.48	5.15	1.56	50	10.05	33.37	5.29	1.43	25.69	232.1	0.170
86	9.58	33.59	4.35	1.84	75	9.87	33.53	4.86	1.69	25.85	217.8	0.226
128	8.36	33.85	2.80	2.21	100	9.11	33.65	3.75	2.02	26.07	197.5	0.278
168	-	34.04	2.04	2.36	150	7.94	33.99	2.29	2.30	26.51	155.6	0.366
248	6.96	34.09	1.71	2.58	200	7.37	34.06	1.87	2.46	26.65	143.2	0.440
328	6.32	34.14	1.21	2.82	250	6.95	34.09	1.70	2.59	26.73	136.2	0.510
492	5.40	34.20	0.75	3.05	300	6.55	34.12	1.38	2.75	26.81	129.3	0.576
750	4.50	34.35	0.34	3.18	400	5.87	34.16	1.01	2.94	26.93	118.7	0.700
870p	4.09[a]	34.47r	0.38	3.20	500	5.37	34.20	0.74	3.06	27.02	110.9	0.815
					600	4.98	34.26	0.49	3.13	27.11	102.8	0.922
933	3.85	34.40	0.41	3.18	700	4.64	34.32	0.36	3.17	27.20	95.2	1.021
1122	3.36	34.45	0.47	3.13	800	4.34	34.37	0.35	3.18	27.27	88.8	1.114
1419	2.75	34.51	0.75	3.08	1000	3.65	34.42	0.42	3.17	27.38	78.9	1.281
1914	2.03	34.63	1.43	2.96	1200	3.17	34.47	0.52	3.11	27.47	71.0	1.433
2407	1.82	34.67	1.96	2.92	1500	2.61	34.53	0.84	3.07	27.57	62.3	1.634
2906	1.74	34.68	2.01	2.84	2000	1.97	34.64	1.53	2.94	27.71	48.8	1.911
					2500	1.80	34.67	2.00	2.92	27.75	46.3	2.150
302	BLACK DOUGLAS; October 11, 1949; 1105 GCT; 42°35'N, 125°54'W; sounding, 1,500 fm; wind, 270°, force 1; weather, overcast; sea, rough; wire angle, 3°.											
0	12.7	32.85E	6.05	0.84	0	12.7	32.85	6.05	0.84	24.81	315.0	0.000
10	11.75	33.03	5.62	0.99	10	11.75	33.03	5.62	0.99	25.13	284.9	0.030
25	10.93	33.17	5.50	1.22	20	11.20	33.13	5.52	1.14	25.31	268.3	0.058
50	8.96	33.57	3.92	1.94	30	10.36	33.24	5.42	1.36	25.54	246.3	0.083
77	8.38	33.71	3.46	2.16	50	8.96	33.57	3.92	1.94	26.02	200.7	0.128
99	8.11	33.82	2.92	2.27	75	8.43	33.71	3.48	2.16	26.22	182.4	0.176
148	7.71	33.96	2.16	2.34	100	8.09	33.82	2.89	2.27	26.36	169.6	0.220
198	7.45	34.02	1.90	2.54	150	7.71	33.96	2.14	2.34	26.52	154.8	0.301
297	6.71	34.07	1.32	2.76	200	7.44	34.02	1.89	2.55	26.61	147.2	0.377
396	5.94	34.13	1.05	2.95	250	7.10	34.04	1.55	2.68	26.67	141.9	0.449
593	5.13	34.22	0.57	3.26	300	6.69	34.07	1.32	2.77	26.75	134.8	0.518
890	4.02	34.38	0.36	3.33	400	5.92	34.13	1.05	2.96	26.90	121.7	0.647
1235	3.05	34.51	0.63	3.09	500	5.50	34.18	0.77	3.14	26.99	114.0	0.764
					600	5.10	34.22	0.56	3.27	27.07	107.2	0.875
					700	4.67	34.28	0.46	3.30	27.17	98.5	0.978
					800	4.32	34.34	0.40	3.32	27.25	90.8	1.072
					1000	3.69	34.42	0.40	3.30	27.38	79.3	1.242

a) Middle thermometer reading of 3.76° rejected.

E See footnote page 249.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

BLACK DOUGLAS; October 11, 1949; 0446 GCT; 42°30'N, 126°48'W; sounding, 1,450 fm; wind, 220°, force 3; weather, fog; sea, rough; wire angle, 35°. 303

0	14.3	32.99E	5.90	0.76	0	14.3	32.99	5.90	0.76	24.60	335.4	0.000	
8	14.45	32.84	5.86	0.70	10	14.44	32.84	5.85	0.68	24.45	349.7	0.034	
20	14.40	32.84	5.73	0.66	20	14.40	32.84	5.73	0.66	24.46	349.2	0.069	
40	12.25	33.12	5.76	1.00	30	13.77	32.96	5.73	0.68	24.68	328.1	0.103	
59	9.07	33.28	5.04	1.58	50	11.13	33.20	5.73	1.37	25.37	262.5	0.162	
76	9.03	33.53	4.33	1.92	75	9.06	33.51	4.40	1.89	25.96	206.6	0.221	
103	8.63	33.71	3.10	2.21	100	8.69	33.70	3.22	2.19	26.17	187.5	0.270	
165	7.77	33.89	1.86	2.46	150	7.94	33.85	1.94	2.43	26.40	166.2	0.358	
239	7.12	34.07	1.67	2.56	200	7.47	33.99	1.76	2.51	26.58	149.7	0.437	
531	4.62	34.09	1.16	2.80	250	7.00	34.07	1.66	2.57	26.71	138.4	0.509	
665	3.91r	34.23	0.53	3.14	300	6.33	34.08	1.60	2.61	26.81	129.4	0.576	
873	3.94	34.34	0.24	3.20	400	5.35	34.09	1.45	2.67	26.94	117.6	0.699	
					500	4.77	34.09	1.26	2.74	27.00	111.7	0.814	
					600	4.45	34.15	0.85	3.00	27.09	104.6	0.922	
					700	4.24	34.25	0.45	3.16	27.19	95.8	1.022	
					800	4.05	34.31	0.28	3.19	27.25	89.9	1.116	
					1000	(3.74)	(34.39)	-	-	(27.35)	(82.1)	(1.288)	

BLACK DOUGLAS; October 10, 1949; 2155 GCT; 42°25'N, 127°41'W; sounding, 2,100 fm; wind, 220°, force 3; weather, overcast; sea, very rough; wire angle, 15°. 304

0	15.1	32.81E	5.27	0.60	0	15.1	32.81	5.27	0.60	24.28	365.8	0.000	
9	15.03	32.81	5.26	0.60	10	15.02	32.81	5.30	0.60	24.30	363.8	0.037	
24	14.96	32.77	5.64	0.62	20	14.99	32.78	5.56	0.61	24.29	365.5	0.073	
48	11.40	32.84	5.57	1.10	30	14.94	32.77	5.65	0.68	24.29	365.6	0.110	
78	8.37	33.28	4.77	1.62	50	10.60	32.86	5.56	1.17	25.20	278.9	0.174	
96	8.22	33.53	3.86	1.97	75	8.41	33.32	4.88	1.54	25.92	211.1	0.235	
143	7.65	-	-	-	100	8.19	33.56	3.83	2.00	26.14	190.5	0.285	
191	7.10	33.95	2.19	2.44	150	7.56	33.84	2.80	2.29	26.45	161.5	0.373	
285	6.37	34.00	1.37	2.77	200	7.02	33.95	2.07	2.47	26.61	146.8	0.450	
379	5.49	34.16	0.92	2.94	250	6.63	33.98	1.61	2.66	26.69	140.1	0.522	
569	4.61	34.22	0.48	3.14	300	6.25	34.02	1.29	2.80	26.77	132.9	0.590	
855	3.91	34.31	0.32	3.22	400	5.36	34.17	0.84	2.97	27.00	111.8	0.712	
1197	3.10	-	-	-	500	4.87	34.20	0.57	3.08	27.08	104.8	0.821	
					600	4.52	34.23	0.43	3.16	27.14	99.6	0.923	
					700	4.26	34.26	0.35	3.19	27.19	95.2	1.020	
					800	4.04	34.30	0.33	3.21	27.25	90.5	1.114	
					1000	3.56	(34.35)	-	-	(27.34)	(83.1)	(1.287)	

BLACK DOUGLAS; October 10, 1949; 1351 GCT; 42°21'N, 128°35'W; sounding, 2,000 fm; wind, 310°, force 1; weather, partly cloudy; sea, very rough; wire angle, 15°. 305

0	16.7	32.07E	5.62	0.38	0	16.7	32.07	5.62	0.38	23.35	454.3	0.000	
10	16.59	32.06	5.61	0.40	10	16.59	32.06	5.61	0.40	23.37	451.9	0.045	
24	16.60	32.09	5.50	0.40	20	16.59	32.07	5.59	0.40	23.38	451.4	0.090	
48	14.14	32.57	6.08	0.60	30	16.54	32.23	5.50	0.41	23.52	438.8	0.135	
73	-	32.76	5.95	1.16	50	13.74	32.59	6.07	0.66	24.39	355.1	0.214	
97	8.25	33.10	5.24	1.60	75	8.50	32.79	5.86	1.22	25.49	251.8	0.290	
146	8.23	33.55	3.94	2.03	100	8.25	33.14	5.20	1.62	25.80	222.6	0.350	
194	7.78	33.85	2.78	2.34	150	8.21	33.58	3.80	2.05	26.15	190.2	0.452	
291	6.91	33.98	1.95	2.60	200	7.72	33.86	2.70	2.37	26.44	163.1	0.541	
388	6.09	34.14	1.15	2.93	250	7.25	33.93	2.26	2.49	26.56	152.0	0.619	
582	4.81	34.23	0.55	3.18	300	6.85	33.99	1.86	2.62	26.67	143.0	0.694	
873	4.05	34.34	0.36	3.30	400	5.98	34.15	1.10	2.96	26.91	121.0	0.825	
1220	3.18	34.40	0.46	3.29	500	5.21	34.19	0.73	3.09	27.03	109.7	0.941	
					600	4.75	34.24	0.53	3.19	27.12	101.6	1.047	
					700	4.44	34.28	0.43	3.26	27.19	95.8	1.145	
					800	4.21	34.32	0.39	3.29	27.25	91.2	1.239	
					1000	3.75	34.37	0.38	3.30	27.33	83.7	1.414	

E See footnote page 249.

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OBSERVED					INTERPOLATED					COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m

306 BLACK DOUGLAS; October 10, 1949; 0707 GCT; 42°16'N, 129°29'W; sounding, 1,800 fm; wind, 270°, force 3; weather, overcast; sea, very rough; wire angle, 5°.

0	17.0	32.47E	5.42	0.46	0	17.0	32.47	5.42	0.46	23.61	429.4	0.000
9	16.78	32.47	5.27	0.45	10	16.79	32.47	5.28	0.45	23.65	426.4	0.043
21	16.79	32.47	5.34	0.46	20	16.79	32.47	5.31	0.46	23.65	426.7	0.086
42	16.72	32.55	5.49	0.48	30	16.77	32.49	5.38	0.46	23.66	425.1	0.128
62	-	32.70	6.19	0.94	50	16.45	32.59	5.70	0.59	23.81	411.2	0.212
81	8.04	32.76	5.65	1.24	75	8.15	32.75	5.76	1.17	25.51	249.6	0.294
196	7.85	33.45	3.92	1.86	100	7.90	32.81	5.26	1.38	25.59	242.1	0.356
294	6.38	33.78	3.22	2.18	150	7.79	33.15	4.51	1.66	25.88	216.0	0.470
393	5.86	33.91	2.90	2.35	200	7.84	33.47	3.90	1.87	26.12	193.6	0.573
589	4.82	34.14	0.76	3.15	250	6.84	33.68	3.46	2.04	26.42	165.4	0.662
884		34.40	0.36	3.34	300	6.34	33.79	3.19	2.20	26.58	151.0	0.741
1228	3.14	34.29r	0.98	3.06	400	5.84	33.92	2.87	2.36	26.74	136.3	0.885
					500	5.35	34.04	1.68	2.78	26.90	122.5	1.014
					600	4.76	34.15	0.72	3.18	27.05	108.5	1.130
					700	4.33	34.25	0.47	3.30	27.18	96.8	1.232
					800	4.02	34.35	0.40	3.34	27.29	86.6	1.324
					1000	3.57	(34.40)	0.45	3.27	(27.38)	(79.4)	(1.490)

307 BLACK DOUGLAS; October 9, 1949; 2246 GCT; 42°11'N, 130°22'W; sounding, 3,000 fm; wind, 270°, force 6; weather, drizzle in last hour; sea, rough; wire angle, 28°.

0	16.9	32.71E	5.64	0.44	0	16.9	32.71	5.64	0.44	23.80	411.2	0.000
9	16.92	32.71	5.75	-	10	16.92	32.71	5.74	0.45	23.80	411.7	0.041
21	-	32.72	5.65	0.46	20	16.91	32.72	5.64	0.46	23.81	411.2	0.082
42	13.69	32.77	6.67	0.60	30	16.84	32.74	6.15	0.50	23.84	408.3	0.123
62	-	32.77	6.35	-	50	10.70	32.77	6.53	0.63	25.11	287.1	0.193
83	-	32.77	6.18	0.75	75	8.65	32.77	6.24	0.72	25.45	255.4	0.261
124	7.64	32.83	6.15	1.28	100	7.94	32.78	6.16	0.97	25.56	244.7	0.323
165	7.54	33.37	4.95	1.60	150	7.56	33.16	5.23	1.52	25.91	212.1	0.438
251	-	33.95	3.86	1.98	200	7.35	33.73	4.49	1.75	26.39	167.4	0.532
337	6.00	33.96	2.86	2.39	250	6.89	33.95	3.88	1.98	26.63	145.8	0.610
506	4.72	34.09	1.35	2.97	300	6.36	33.96	3.28	2.22	26.71	138.6	0.682
766	-	34.27	0.36	3.30	400	5.45	34.00	2.25	2.64	26.85	125.4	0.814
1092	3.36	34.14r	2.30r	2.55r	500	4.77	34.08	1.41	2.95	27.00	112.5	0.933
					600	(4.30)	34.16	0.88	3.12	(27.11)	(102.3)	(1.040)
					700	(3.99)	34.23	0.48	3.25	(27.20)	(94.3)	(1.139)
					800	(3.77)	(34.28)	-	-	(27.26)	(89.0)	(1.230)
					1000	(3.47)	(34.37)	-	-	(27.36)	(80.5)	(1.400)

308 BLACK DOUGLAS; October 9, 1949; 1633 GCT; 42°06'N, 131°16'W; sounding, 2,250 fm; wind, 260°, force 5; weather, drizzle in last hour, overcast; sea, very rough; wire angle, 10°.

0	17.0	32.81E	5.80	0.51	0	17.0	32.81	5.80	0.51	23.86	406.0	0.000
9	16.79	32.81	5.73	0.55	10	16.79	32.81	5.72	0.55	23.91	401.5	0.040
24	16.79	32.82	4.72r	0.50	20	16.79	32.82	5.72	0.51	23.91	401.1	0.081
48	13.35	32.79	6.20	0.68	30	16.79	32.82	5.86	0.50	23.91	401.5	0.121
73	9.71	32.79	6.21	1.02	50	12.50	32.79	6.20	0.72	24.80	317.1	0.193
97	8.66	32.83	5.88	1.18	75	9.56	32.79	6.20	1.04	25.32	267.4	0.266
144	7.41	33.01	5.64	1.38	100	8.45	32.83	5.85	1.19	25.53	248.4	0.330
191	7.15	33.61	4.89	1.62	150	7.37	33.07	5.59	1.42	25.87	216.2	0.447
284	6.40	33.87	3.27	2.08	200	7.10	33.67	4.72	1.65	26.38	168.7	0.543
378	5.42	33.95	2.37	2.59	250	6.73	33.82	3.77	1.90	26.55	153.3	0.623
569	4.46	34.14	0.78	3.10	300	6.23	33.89	3.10	2.17	26.67	142.2	0.697
861	3.71	34.31	0.37	3.26	400	5.26	33.97	2.16	2.68	26.85	125.5	0.830
1207	3.18	34.45	0.38	3.30	500	4.74	34.06	1.17	2.99	26.98	113.7	0.949
					600	4.35	34.16	0.70	3.13	27.10	102.9	1.059
					700	4.05	34.23	0.50	3.20	27.19	95.0	1.157
					800	3.84	34.28	0.40	3.24	27.26	89.8	1.250
					1000	3.49	34.37	0.36	3.28	27.36	80.6	1.420

E See footnote page 249.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

BLACK DOUGLAS; October 9, 1949; 0929 GCT; 42°02'N, 132°10'W; sounding, 2,000 fm; wind, 300°, force 2; weather, cloudy; sea, slight; wire angle, 30°. 309

0	16.7	32.75E	5.83	0.64	0	16.7	32.75	5.83	0.64	23.88	403.7	0.000	
8	16.58	32.75	5.70	0.65	10	16.59	32.75	5.70	0.65	23.91	401.5	0.040	
20	16.56	32.75	5.74	0.64	20	16.56	32.75	5.74	0.64	23.91	401.0	0.080	
41	16.54	32.76	5.76	0.64	30	16.55	32.75	5.75	0.64	23.91	401.3	0.121	
62	11.53	32.76	6.53	0.83	50	16.40	32.76	5.85	0.69	23.96	397.8	0.200	
83	9.39	32.79	6.25	1.04	75	10.00	32.77	6.42	0.99	25.23	276.3	0.285	
126	7.75	32.74	6.38	1.27	100	8.60	32.78	6.26	1.14	25.47	254.3	0.351	
169	7.46	33.06	5.82	1.50	150	7.56	32.87	6.21	1.40	25.69	233.7	0.473	
255	7.03	33.73	4.68	1.71	200	7.32	33.39	5.21	1.60	26.13	192.4	0.580	
340	5.95	33.75	4.02	2.08	250	7.06	33.72	4.72	1.70	26.42	165.2	0.669	
514	4.28	33.97	2.28	2.68	300	6.46	33.74	4.34	1.88	26.52	156.3	0.749	
783	3.92	34.24	0.55	3.22	400	5.25	33.79	3.45	2.34	26.71	138.7	0.897	
1120	3.58	34.24r	1.43r	2.93r	500	4.35	33.95	2.44	2.65	26.94	117.4	1.025	
					600	4.11	34.08	1.30	2.92	27.07	105.9	1.136	
					700	3.97	34.17	0.62	3.18	27.15	98.5	1.239	
					800	3.90	(34.25)	(0.52)	(3.23)	(27.22)	(92.9)	(1.334)	
					1000	3.67	(34.33)	-	-	(27.31)	(85.7)	(1.513)	

BLACK DOUGLAS; October 8 and 9, 1949; 0255, 2311 GCT; 41°55'N, 132°59'W; sounding, 2,200 fm; wind, 290°, force 2; weather, overcast; sea, rough; wire angle, 10°, 9°. 310

0	17.1	32.79E	5.65	0.56	0	17.1	32.79	5.65	0.56	23.82	409.1	0.000	
9	16.90	32.81	4.77r	0.56	10	16.90	32.81	5.60	0.56	23.88	404.1	0.041	
24	16.89	32.82	5.56	0.55	20	16.89	32.82	5.56	0.55	23.89	403.4	0.081	
48	14.04	32.82	6.38	0.59	30	16.89	32.82	5.60	0.55	23.89	403.7	0.121	
73	10.76	32.90	3.42r	0.89	50	13.70	32.82	6.38	0.60	24.59	337.5	0.196	
98	9.54	32.82	5.93	1.00	75	10.60	32.90	6.25	0.90	25.23	276.4	0.272	
146	8.49	32.82	5.53	1.24	100	9.45	32.82	5.89	1.00	25.36	264.1	0.340	
195	7.57	33.58	4.73	1.66	150	8.40	32.82	5.51	1.26	25.53	249.2	0.468	
292	6.47	33.91	3.58	2.04	200	7.50	33.62	4.66	1.70	26.28	177.9	0.575	
390	5.46	33.98	2.31	2.54	250	6.90	33.82	4.10	1.91	26.52	155.6	0.658	
584	4.25	34.13	0.85	3.00	300	6.39	33.92	3.48	2.07	26.67	141.9	0.732	
877	3.66	34.34	0.25	3.20	400	5.38	33.99	2.20	2.58	26.85	125.4	0.866	
1218	2.94	34.45	0.71r	3.11	500	4.63	34.06	1.30	2.82	27.00	112.5	0.985	
					600	4.20	34.14	0.76	3.02	27.10	102.7	1.092	
959	3.44	34.41	0.36	3.17	700	3.95	34.22	0.46	3.14	27.19	94.7	1.191	
1145	3.11	34.49r	0.38	3.14	800	3.80	34.30	0.30	3.18	27.27	87.9	1.282	
1437	2.57	34.54	0.70	3.01	1000	3.39	34.39	0.35	3.18	27.39	78.0	1.449	
1934	1.99	34.61	1.44	2.84	1200	3.01	34.44	0.42	3.12	27.46	71.5	1.598	
2434	1.79	34.65	2.02	2.66	1500	2.51	34.55	0.78	3.00	27.59	59.6	1.795	
2934	1.69	34.61	1.38r	2.82r	2000	1.95	34.62	1.52	2.81	27.69	50.0	2.069	
					2500	1.77	34.65	-	-	27.73	47.3	2.313	

E See footnote page 249.

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

401 BLACK DOUGLAS; October 5, 1949; 1245 GCT; 40°50'N, 124°50'W; sounding, 1,420 fm; wind, calm; weather, cloudy; sea, rough; wire angle, 8°.

0	11.0	33.46E	6.29	1.10	0	11.0	33.46	6.29	1.10	25.60	239.9	0.000
10	10.95	33.42	5.94	1.11	10	10.95	33.42	5.94	1.11	25.58	242.3	0.024
24	10.71	33.46	5.96	1.17	20	10.80	33.45	5.95	1.14	25.63	237.9	0.048
49	10.40	33.44	5.54	1.44	30	10.60	33.46	5.90	1.21	25.67	234.0	0.072
73	8.95	33.73	3.18	1.98	50	10.38	33.44	5.42	1.48	25.69	232.1	0.118
97	8.37	33.73	2.70	2.20	75	8.85	33.73	3.13	2.00	26.17	187.1	0.171
146	7.81	34.00	2.04	2.34	100	8.32	33.73	2.63	2.21	26.25	179.7	0.217
195	7.29	34.13	1.76	2.40	150	7.77	34.02	2.02	2.34	26.56	151.0	0.299
292	6.66	34.00r	1.33	2.70	200	7.25	34.13	1.73	2.41	26.72	136.3	0.371
389	6.21	34.18	1.00	2.88	250	6.89	34.13	1.50	2.58	26.77	132.3	0.438
582	5.12	34.25	0.55	3.11	300	6.62	34.13	1.30	2.71	26.81	129.7	0.504
876	4.08	34.42	0.42	3.21	400	6.16	34.19	0.96	2.90	26.92	120.3	0.629
1224	3.20	34.45	0.70	3.11	500	5.52	34.23	0.70	3.03	27.03	110.5	0.744
					600	5.04	34.26	0.54	3.12	27.11	103.7	0.851
					700	4.65	34.31	0.46	3.18	27.19	96.0	0.951
					800	4.29	34.38	0.43	3.20	27.29	87.5	1.043
					1000	3.74	34.44	0.50	3.20	27.39	78.4	1.208

402 BLACK DOUGLAS; October 5, 1949; 2043 GCT; 40°41'N, 125°41'W; sounding, 1,660 fm; wind, 280°, force 2; weather, partly cloudy; sea, very rough; wire angle, 41°.

0	14.9	32.79E	5.70	0.61	0	14.9	32.79	5.70	0.61	24.31	362.4	0.000
8	14.96	32.79	5.80	0.62	10	14.95	32.79	5.80	0.63	24.30	363.6	0.036
20	14.36	32.79	5.61	0.69	20	14.36	32.79	5.61	0.69	24.43	351.8	0.072
40	13.66	32.88	5.63	0.79	30	14.01	32.81	5.60	0.74	24.52	344.0	0.107
59	9.72	32.97	5.54	1.18	50	11.60	32.92	5.60	0.96	25.07	291.3	0.170
78	9.27	33.26	5.01	1.41	75	9.39	33.20	5.17	1.38	25.67	224.7	0.235
116	8.18	33.53	3.92	1.82	100	8.41	33.46	4.26	1.68	26.02	201.2	0.288
153	8.12	33.68	3.50	2.02	150	8.13	33.66	3.55	2.00	26.22	183.0	0.384
223	7.09	34.02	2.31	2.41	200	7.47	33.96	2.69	2.27	26.56	152.0	0.468
291	6.36	34.05	1.64	2.68	250	6.75	34.03	2.00	2.53	26.71	137.9	0.541
432	-	34.14	0.85	2.95	300	6.29	34.05	1.58	2.70	26.79	131.1	0.607
645	4.52	34.32	0.36	3.32	400	5.59	34.11	1.00	2.90	26.92	119.2	0.733
938	3.75	34.47	0.46	3.16	500	5.08	34.20	0.60	3.07	27.05	107.4	0.846
					600	4.68	34.29	0.40	3.27	27.17	96.9	0.948
					700	4.35	34.36	0.35	3.32	27.26	89.9	1.041
					800	4.07	34.42	0.36	3.27	27.34	82.0	1.127
					1000	(3.62)	(34.47)	-	-	(27.42)	(75.0)	(1.284)

403 BLACK DOUGLAS; October 6, 1949; 0417 GCT; 40°32'N, 126°32'W; sounding, 1,700 fm; wind, 280°, force 1; weather, cloudy; sea, rough; wire angle, 0°.

0u	16.0	32.69E	5.74	0.50	0	16.0	32.69	5.74	0.50	23.99	392.8	0.000
13u	15.96	32.69	5.62	0.51	10	15.98	32.69	5.61	0.51	23.99	392.6	0.039
33u	15.41	32.72	5.80	0.53	20	15.91	32.70	5.64	0.52	24.02	390.6	0.079
68u	11.75	33.01	5.64	1.13	30	15.70	32.71	5.79	0.53	24.08	385.7	0.117
101u	9.28	33.39	4.62	1.72	50	13.95	32.81	5.76	0.64	24.53	343.2	0.190
134u	8.61	33.69	3.61	2.09	75	10.65	33.09	5.51	1.30	25.37	263.0	0.266
199	7.47	34.00	2.18	2.38	100	9.31	33.36	4.68	1.69	25.81	222.2	0.327
264	-	34.11	1.27	2.70	150	8.31	33.80	3.18	2.18	26.31	175.2	0.426
390	5.42	34.16	0.93	2.84	200	7.45	34.00	2.16	2.38	26.59	148.7	0.507
509	4.94	34.22	0.58	3.03	250	6.75	34.06	1.40	2.64	26.74	135.7	0.577
737	4.09	34.31	0.54	3.01	300	6.14	34.10	1.16	2.75	26.85	125.6	0.643
1029	3.40	34.44	0.44	3.04	400	5.41	34.17	0.89	2.85	26.99	112.5	0.762
1208	3.08	34.41r	0.41	3.04	500	4.96	34.22	0.60	3.02	27.08	104.5	0.871
					600	4.56	34.25	0.57	3.02	27.15	98.6	0.972
					700	4.22	34.29	0.55	3.01	27.22	92.5	1.068
					800	3.90	34.35	0.51	3.01	27.30	85.3	1.156
					1000	3.45	34.42	0.45	3.04	27.40	76.7	1.319

E See footnote page 249.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

BLACK DOUGLAS; October 6, 1949; 1120 GCT; 40°23'N, 127°22'W; sounding, 910 fm; wind, 300°, force 2; weather, cloudy; sea, rough; wire angle, 12°. 404

0	17.2	32.57E	5.54	0.46	0	17.2	32.57	5.54	0.46	23.62	428.2	0.000
10	17.21	32.59	5.50	0.48	10	17.21	32.59	5.50	0.48	23.63	427.1	0.043
24	17.25	32.63	5.54	0.46	20	17.24	32.62	5.52	0.46	23.65	425.8	0.086
49	14.08	32.74	6.20	0.60	30	17.25	32.66	5.76	0.47	23.68	423.5	0.128
73	-	32.83	6.03	0.92	50	13.80	32.75	6.20	0.60	24.51	344.6	0.205
98	8.70	32.84	5.79	1.20	75	9.28	32.83	6.00	0.94	25.40	260.4	0.280
146	8.15	33.46	4.37	1.71	100	8.67	32.84	5.75	1.22	25.50	250.8	0.344
195	-	33.91	2.83	2.20	150	8.12	33.52	4.28	1.75	26.11	193.4	0.455
290	7.09	34.07	1.83	2.56	200	7.72	33.93	2.75	2.22	26.50	157.9	0.543
384	6.23	34.16	1.45	2.73	250	7.38	34.03	2.16	2.45	26.63	146.2	0.619
573	-	34.16	0.72	2.99	300	7.02	34.08	1.76	2.58	26.71	138.6	0.691
854	3.93	34.33	0.39	2.96	400	6.07	34.16	1.38	2.76	26.90	121.6	0.820
1194	3.10	34.43	0.70	3.12	500	5.31	34.16	0.94	2.93	27.00	113.2	0.938
					600	4.77	34.17	0.66	3.00	27.07	107.0	1.048
					700	4.39	34.23	0.49	2.98	27.16	98.9	1.150
					800	4.07	34.30	0.40	2.96	27.24	91.0	1.246
					1000	3.55	34.40	0.46	3.01	27.38	79.3	1.416

BLACK DOUGLAS; October 6, 1949; 1914 GCT; 40°14'N, 128°14'W; sounding, 2,490 fm; wind, 300°, force 5; weather, cloudy; sea, very rough; wire angle, 6°. 405

0	16.8	32.70E	5.60	0.47	0	16.8	32.70	5.60	0.47	23.82	409.6	0.000
10	16.90	32.66	5.64	0.46	10	16.90	32.66	5.64	0.46	23.76	415.2	0.041
25	16.96	32.92	5.69	0.48	20	16.95	32.84	5.67	0.47	23.89	403.3	0.082
50	16.70	32.83	5.35	0.52	30	16.95	32.92	5.66	0.48	23.95	397.8	0.122
74	-	33.10	5.83	1.20	50	16.70	32.83	5.35	0.52	23.94	399.1	0.202
99	9.94	33.37	4.88	1.58	75	12.20	33.11	5.83	1.22	25.11	288.4	0.288
148	8.63	33.62	3.65	2.00	100	9.91	33.38	4.86	1.58	25.72	229.9	0.353
196	7.72	33.86	3.39	2.04	150	8.59	33.63	3.65	2.00	26.13	191.8	0.458
293	6.84	34.07	1.86	2.61	200	7.66	33.88	3.33	2.05	26.47	160.6	0.546
389	5.82	34.13	1.30	2.86	250	7.23	34.00	2.47	2.35	26.62	146.5	0.623
582	-	34.14	1.04	-	300	6.77	34.08	1.79	2.64	26.75	135.1	0.693
872	3.96	34.33	0.57	3.18	400	5.73	34.13	1.28	2.87	26.92	119.4	0.820
1214u	3.65	34.42	0.62	3.14	500	5.08	34.14	1.16	3.01	27.01	111.8	0.936
					600	4.66	34.14	1.01	3.09	27.06	107.8	1.046
					700	4.36	34.20	0.81	3.14	27.14	100.7	1.149
					800	4.12	34.28	0.65	3.17	27.22	93.0	1.247
					1000	3.75	34.38	0.54	3.18	27.34	83.0	1.423

BLACK DOUGLAS; October 5, 1949; 0147 GCT; 39°43'N, 124°23'W; sounding, 1,115 fm; wind, 290°, force 2; weather, overcast; sea, rough; wire angle, 0°. 461

0	10.9	33.46E	5.51	1.45	0	10.9	33.46	5.51	1.45	25.62	238.1	0.000
9	10.80	33.49	5.62	1.30	10	10.78	33.49	5.60	1.31	25.66	234.3	0.024
23	10.54	33.44	5.54	1.38	20	10.60	33.44	5.56	1.37	25.65	235.2	0.047
47	9.93	33.57	5.04	1.60	30	10.35	33.45	5.42	1.42	25.70	230.6	0.070
71	8.65	33.64	3.40	1.96	50	9.77	33.58	4.98	1.64	25.90	212.0	0.115
94	8.14	33.80	2.92	2.08	75	8.51	33.65	3.33	1.99	26.16	188.3	0.165
142	7.86	34.04	2.16	2.24	100	8.09	33.84	2.73	2.10	26.37	168.2	0.209
189	7.43	33.96	1.96	2.34	150	7.80	34.04	2.10	2.26	26.57	150.1	0.288
283	5.21r	33.98	1.36	2.63	200	7.31	33.96	1.90	2.36	26.58	149.9	0.364
378	5.88	34.11	0.83	2.90	250	6.86	33.96	1.60	2.52	26.64	144.6	0.437
568	5.18	34.23	0.49	3.04	300	6.47	34.00	1.23	2.69	26.72	137.1	0.508
854	4.18	34.40	0.41	3.20	400	5.76	34.13	0.73	2.93	26.92	119.8	0.637
1194	3.24	34.56	0.78	3.15	500	5.42	34.20	0.53	2.99	27.01	111.6	0.752
					600	5.05	34.25	0.46	3.06	27.10	104.4	0.860
					700	4.67	34.32	0.42	3.13	27.20	95.5	0.960
					800	4.34	34.37	0.40	3.18	27.27	88.9	1.052
					1000	3.75	34.47	0.48	3.19	27.41	76.5	1.218

E See footnote page 249.

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4910

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

501 HORIZON; October 5, 1949; 2004 GCT; 38°50'N, 124°05'W; sounding, missing; wind, 320°, force 3; weather, partly cloudy; sea, moderate; wire angle, 23°.

0	13.1	32.99E	6.08	0.72	0	13.1	32.99	6.08	0.72	24.84	312.3	0.000
8	13.10	33.01	6.03	0.73	10	13.09	33.02	6.02	0.73	24.86	310.1	0.311
22	12.61	33.08	5.97	-	20	12.90	33.06	5.98	0.89	24.93	303.9	0.619
44	10.12	33.19	5.24	1.25	30	11.50	33.12	5.87	1.02	25.24	274.5	0.907
66	9.35	33.33	4.82	1.32	50	9.81	33.23	5.12	1.28	25.62	238.7	0.142
87	8.87	33.51	3.89	1.64	75	9.08	33.40	4.52	1.48	25.88	215.0	0.199
132	8.27	33.73	2.63	1.96	100	8.65	33.58	3.29	1.77	26.08	195.8	0.250
176	7.82	33.89	2.37	2.05	150	8.06	33.80	2.52	2.02	26.35	171.5	0.342
265	7.26	34.05	1.75	2.21	200	7.63	33.96	2.23	2.07	26.53	154.4	0.424
355	6.08	33.93	0.51	2.59	250	7.36	34.05	1.87	2.16	26.64	144.6	0.498
535	5.24	34.14	0.56	2.74	300	6.90	34.01	1.14	2.38	26.67	142.2	0.569
803	4.54	34.33	0.54	2.88	400	5.74	33.96	0.51	2.64	26.79	132.2	0.707
1107	3.59	34.43	0.56	2.86	500	5.35	34.10	0.55	2.72	26.94	118.1	0.832
					600	5.07	34.20	0.55	2.79	27.06	108.4	0.945
					700	4.83	34.28	0.55	2.85	27.15	100.5	1.050
					800	4.55	34.33	0.54	2.88	27.22	94.3	1.147
					1000	3.93	34.40	0.55	2.86	27.34	83.7	1.326

502 HORIZON; October 6, 1949; 0219, 0405 GCT; 38°39'N, 124°54'W; sounding, 2,150 fm; wind, 320°, force 3; weather, cloudy; sea, moderate; wire angle, 40°, 42°.

0	13.9	32.90E	5.88	0.75	0	13.9	32.90	5.88	0.75	24.61	334.4	0.000
8	13.19	32.88	6.00	0.77	10	13.18	32.88	6.05	0.76	24.74	322.2	0.033
19	12.66	32.97	6.17	0.58	20	12.66	32.97	6.17	0.58	24.91	306.1	0.064
38	12.25	32.90	5.92	0.52	30	12.42	32.93	6.14	0.53	24.92	305.0	0.095
57	9.32	32.86	5.77	1.10	50	9.25	32.87	5.82	0.63	25.44	256.6	0.151
74	9.91	33.31	5.03	1.27	75	9.91	33.34	5.05	1.27	25.69	232.5	0.212
106	9.05	33.68	3.51	1.85	100	9.21	33.66	3.80	1.74	26.06	198.4	0.266
132	8.30	33.77	2.61	1.95	150	7.93	33.93	2.14	2.08	26.47	160.1	0.356
150p	7.93	33.93	2.14	2.08	200	7.39	34.02	1.93	2.15	26.62	146.4	0.432
188	7.50	34.00	2.20r	1.90r	250	6.90	34.05	1.90	2.15	26.71	138.5	0.503
383p	5.83	33.95	1.68	2.25	300	6.48	34.02	1.90	2.17	26.74	135.7	0.572
699p	4.82r	34.23	1.26r	2.10r	400	5.75	33.96	1.54	2.28	26.78	132.4	0.706
930p	3.88	34.38	0.53	2.58	500	5.31	34.04	0.66	2.47	26.90	122.1	0.833
					600	4.95	34.14	0.55	2.57	27.02	111.4	0.950
1188	3.23	34.45	0.74	2.78r	700	4.60	34.23	0.55	2.58	27.13	101.4	1.056
1456	2.74	34.38r	0.98	2.44	800	4.26	34.31	0.54	2.58	27.23	92.3	1.153
1916	2.07	34.54	1.51	2.40	1000	3.69	34.41	0.56	2.56	27.37	80.1	1.326
2390	1.82	34.58	2.09	2.33	1200	3.20	34.45	0.76	2.46	27.45	73.0	1.479
2872	1.68	34.58	2.43	2.24	1500	2.66	34.49	1.05	2.44	27.53	65.7	1.687
					2000	2.02	34.55	1.64	2.40	27.63	56.0	1.992
					2500	1.78	34.58	2.22	2.32	27.68	52.5	2.264

E Evaporation of all salinity samples occurred on Cruise 4910 on stations 501 through 871. Estimated average corrections to values given here can be made by subtracting 0.045 ‰ from the value of S, 0.035 from σ_t and by adding 3.4 to 10^5 δ at all depths; to ΔD add 0.003 for each 100 meter depth increment.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

HORIZON; October 6, 1949; 1102 GCT; 38°28'N, 125°43'W; sounding, 2,400 fm; wind, 320°, force 3; weather, partly cloudy; sea, rough; wire angle, 15°. 503

0	16.0	33.15E	5.77	-	0	16.0	33.15	5.77	-	24.35	359.3	0.000
10	16.02	33.17	5.77	0.02	10	16.02	33.17	5.77	0.02	24.36	358.6	0.036
24	15.50	33.15	5.79	0.19	20	15.53	33.16	5.78	0.14	24.46	349.0	0.071
48	10.67	32.88	5.73	0.68	30	15.50	33.11	5.79	0.32	24.43	352.1	0.106
73	9.37	33.15	5.28	0.97	50	10.40	32.88	5.70	0.71	25.25	274.0	0.169
96	8.87	33.42	4.18	1.20	75	9.33	33.17	5.10	0.99	25.65	236.2	0.233
146	8.04	33.62	3.43	1.56	100	8.77	33.45	4.10	1.24	25.96	207.1	0.288
194	7.61	33.84	2.64	1.78	150	8.00	33.64	3.36	1.58	26.23	182.7	0.386
291	6.70	34.02	1.79	2.09	200	7.55	33.87	2.55	1.80	26.47	159.9	0.471
388	5.74	34.04	1.24	2.34	250	7.12	33.99	2.07	1.97	26.63	146.6	0.548
581	4.84	34.22	0.43	1.58r	300	6.60	34.02	1.75	2.12	26.72	137.5	0.619
872	4.10	34.33	0.44	1.89r	400	5.65	34.05	1.14	2.36	26.87	124.4	0.750
1166	3.27	34.42	0.72	2.87	500	5.09	34.16	0.67	2.67	27.02	110.3	0.867
					600	4.79	34.23	0.43	2.84	27.11	102.6	0.974
					700	4.58	34.27	0.43	2.86	27.17	98.1	1.074
					800	4.32	34.31	0.43	2.87	27.23	93.2	1.169
					1000	3.74	34.37	0.55	2.87	27.33	83.7	1.346

HORIZON; October 6, 1949; 1715 GCT; 38°17'N, 126°32'W; sounding, 2,250 fm; wind, 310°, force 4; weather, cloudy; sea, rough; wire angle, 20°. 504

0	16.5	33.08E	5.67	0.34	0	16.5	33.08	5.67	0.34	24.17	376.1	0.000
9	16.53	33.15	5.62	0.36	10	16.53	33.15	5.62	0.36	24.15	371.3	0.037
23	16.52	33.13	5.70	0.44	20	16.54	33.14	5.69	0.41	24.22	372.3	0.075
46	14.96	33.10	5.72	0.74	30	16.33	33.12	5.74	0.51	24.25	369.5	0.112
70	10.97	33.21	5.49	1.37	50	14.30	33.10	5.69	0.80	24.68	329.0	0.182
82	9.34	33.31	4.81	1.54	75	9.95	33.26	5.37	1.50	25.62	239.1	0.252
115	8.70	33.51	3.93	1.74	100	8.93	33.41	4.34	1.66	25.91	212.5	0.309
146	8.05	33.77	3.04	1.92	150	7.96	33.79	2.95	1.95	26.35	170.9	0.405
212	6.87	33.95	1.67	2.31	200	7.03	33.94	1.79	2.26	26.60	147.7	0.484
377	5.92	34.02	1.07	2.67	250	6.56	33.98	1.47	2.44	26.70	139.0	0.556
566	5.04	34.20	0.46	2.81	300	6.28	33.99	1.32	2.56	26.74	135.5	0.625
852	4.17	34.31	0.39	2.88	400	5.79	34.04	0.99	2.70	26.84	126.5	0.756
1268	3.02	34.43	0.81	2.84	500	5.28	34.14	0.62	2.78	26.98	114.2	0.876
					600	4.93	34.22	0.45	2.83	27.09	105.2	0.986
					700	4.61	34.26	0.41	2.86	27.16	99.3	1.088
					800	4.31	34.29	0.40	2.88	27.21	94.5	1.185
					1000	3.74	34.35	0.48	2.88	27.32	85.2	1.365

HORIZON; October 6, 1949; 2323 GCT; 38°06'N, 127°20'W; sounding, missing; wind, 310°, force 3; weather, partly cloudy; sea, rough; wire angle, 42°. 505

0	17.3	32.81E	5.56	0.36	0	17.3	32.81	5.56	0.36	23.77	413.8	0.000
7	17.33	32.88	5.50	0.37	10	17.31	32.91	5.47	0.37	23.86	405.9	0.041
18	17.36r	32.95	5.25	0.36	20	17.26	32.95	5.25	0.36	23.90	402.1	0.081
37	13.81	32.81	5.85	0.60	30	17.23	32.89	5.75	0.52	23.86	406.1	0.122
54	10.33	32.84	5.68	0.76	50	10.78	32.83	5.73	0.70	25.15	283.9	0.191
72	9.22	32.79	5.50	0.93	75	9.21	32.79	5.46	0.96	25.38	262.6	0.259
107	8.94	33.33	4.51	1.46	100	9.18	33.24	5.00	1.31	25.73	229.5	0.321
143	7.96	33.60	3.49	1.79	150	7.85	33.63	3.42	1.80	26.24	181.3	0.424
216	7.13	33.82	2.91	1.90	200	7.31	33.79	3.02	1.85	26.45	162.5	0.509
289	6.28	33.86	1.99	2.32	250	6.75	33.84	2.44	2.09	26.56	152.0	0.587
437	5.26	34.11	1.11	2.53	300	6.17	33.88	1.89	2.36	26.67	142.2	0.662
676	4.46	34.23	0.35	2.80	400	5.47	34.07	1.34	2.49	26.91	120.6	0.793
1057	3.40	34.42	0.55	2.94	500	5.01	34.14	0.77	2.62	27.01	111.7	0.909
					600	4.69	34.19	0.48	2.73	27.09	105.2	1.018
					700	4.39	34.25	0.35	2.81	27.17	97.7	1.119
					800	4.11	34.31	0.35	2.86	27.25	90.9	1.213
					1000	3.57	34.40	0.50	2.93	27.38	79.5	1.384

E See footnote page 260.

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

509 HORIZON; October 7, 1949; 1706 GCT; 37°21'N, 130°36'W; sounding, 2,750 fm; wind, 350°, force 6; weather, cloudy; sea, very high; wire angle, 50°.

0	18.0	32.79E	5.88	0.40	0	18.0	32.79	5.88	0.40	23.60	430.2	0.000
6	18.01	32.88	5.90	0.48	10	18.02	32.85	5.90	0.50	23.64	426.6	0.043
15	18.01	32.74	5.90	0.52	20	18.03	32.76	5.98	0.51	23.57	433.7	0.086
31	18.05	32.86	6.10	0.49	30	18.05	32.86	6.09	0.49	23.64	427.1	0.129
47	14.08	32.83	5.88	0.52	50	13.40	32.83	5.87	0.54	24.65	331.1	0.205
74	10.73	32.84	5.75	0.64	75	10.64	32.84	5.73	0.65	25.18	281.6	0.281
157	8.32	33.46	4.47	1.48	100	9.64	32.95	5.39	0.97	25.43	257.6	0.349
250	7.47	33.86	3.69	1.79	150	8.43	33.40	4.53	1.44	25.97	206.7	0.464
312	6.60	33.98	2.82	2.06	200	7.85	33.69	4.16	1.61	26.29	177.5	0.561
374	5.81	33.93	2.08	2.79	250	7.47	33.86	3.69	1.79	26.48	160.3	0.645
558	4.90	34.09	0.59	2.82	300	6.78	33.97	2.98	2.01	26.66	143.4	0.721
844u	3.66	34.42	0.46	2.92	400	5.56	33.92	1.78	2.35	26.78	133.0	0.859
1096	3.29	34.42	0.55	2.88	500	5.14	34.01	0.88	2.68	26.90	122.3	0.987
					600	4.66	34.16	0.54	2.85	27.07	106.4	1.101
					700	4.12	34.33	0.46	2.90	27.26	88.3	1.198
					800	3.78	34.42	0.46	2.92	27.37	78.8	1.282
					1000	3.40	34.42	0.49	2.90	27.41	75.9	1.437

510 HORIZON; October 7, 1949; 2349 GCT; 37°10'N, 131°25'W; sounding, missing; wind, 320°, force 6; weather, cloudy; sea, high; wire angle, 40°.

0	19.5	33.28E	5.43	0.51	0	19.5	33.28	5.43	0.51	23.60	430.2	0.000
7	19.47	33.28	5.41	0.46	10	19.46	33.28	5.37	0.46	23.61	429.6	0.043
19	19.43	33.28	5.20	0.44	20	19.43	33.28	5.20	0.43	23.62	429.2	0.086
40	17.60	33.28	5.27	0.44	30	19.41	33.28	5.21	0.42	23.62	429.1	0.129
59	12.39	32.94	6.29	0.52	50	14.75	33.07	6.13	0.47	24.56	340.2	0.206
96	10.91	32.97	5.85	0.67	75	11.53	32.93	6.15	0.58	25.09	290.0	0.285
202	8.05	33.84	4.81	1.38	100	10.80	32.98	5.82	0.70	25.26	274.1	0.355
328	6.60	33.95	2.75	2.08	150	9.00	33.50	5.45	1.03	25.97	207.8	0.475
415	5.77	34.00	2.31	2.31	200	8.08	33.84	4.86	1.38	26.37	169.7	0.570
501	5.39	34.11	0.92	2.66	250	7.48	33.90	3.85	1.70	26.51	157.4	0.652
762	4.17	34.23	0.34	2.82	300	6.90	33.93	2.96	1.96	26.61	148.2	0.728
1121	3.36	34.49	0.54	2.74	400	5.87	33.99	2.45	2.27	26.79	131.5	0.868
1399	2.71	34.56	0.84	2.72	500	5.38	34.11	0.94	2.65	26.95	117.7	0.992
					600	4.82	34.16	0.60	2.76	27.05	108.4	1.105
					700	4.35	34.20	0.41	2.81	27.14	100.7	1.210
					800	4.06	34.26	0.34	2.82	27.22	93.7	1.307
					1000	3.60	34.41	0.41	2.79	27.38	79.2	1.480

601 HORIZON; October 10, 1949; 1753 GCT; 37°16'N, 123°10'W; sounding, 700 fm; wind, 290°, force 1; weather, fog; sea, moderate; wire angle, 28°.

0	11.6	33.04E	6.01	0.14r	0	11.6	33.04	6.01	(0.91)	25.16	281.6	0.000
9	11.54	33.08	5.78	0.91	10	11.52	33.08	5.78	0.91	25.21	277.4	0.028
22	11.46	33.12	5.78	0.94	20	11.47	33.11	5.77	0.95	25.24	274.4	0.056
43	11.47	33.22	5.36	1.22	30	11.46	33.15	5.67	1.03	25.27	271.6	0.083
65	9.54	33.39	4.05	1.80	50	11.19	33.26	5.02	1.56	25.41	259.1	0.136
86	9.30	33.57	3.66	1.86	75	9.85	33.48	3.86	1.83	25.81	221.2	0.196
130	8.32	33.71	2.92	2.09	100	8.83	33.65	3.40	1.94	26.11	193.3	0.248
346	6.94	33.77	1.12	2.59	150	8.07	33.72	2.69	2.14	26.28	177.7	0.340
540	5.73	34.11	0.50	2.87	200	7.62	33.73	2.21	2.27	26.35	171.4	0.428
821	4.32	34.33	0.42	3.01	250	7.32	33.73	1.78	2.39	26.40	167.9	0.513
					300	7.11	33.74	1.41	2.49	26.43	165.1	0.596
					400	6.69	33.85	0.85	2.69	26.58	152.4	0.755
					500	6.00	34.05	0.56	2.83	26.83	129.9	0.896
					600	5.34	34.18	0.44	2.91	27.01	113.4	1.018
					700	4.81	34.26	0.42	2.96	27.13	101.8	1.125
					800	4.40	34.32	0.42	3.00	27.23	93.3	1.223

E See footnote page 260.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	
HORIZON; October 10, 1949; 1202, 1217 GCT; 37°03'N, 123°57'W; sounding, 2,095 fm; wind, 270°, force 2; weather, drizzle; sea, moderate; wire angle, 42°, 44°.													602
0	14.6	33.21E	5.82	0.40	0	14.6	33.21	5.82	0.40	24.69	326.7	0.000	
7	14.59	33.31	5.82	0.44	10	14.57	33.30	5.83	0.43	24.78	318.7	0.032	
17	14.51	33.24	-	0.40	20	14.50	33.21	5.82	0.40	24.72	324.4	0.064	
					30	13.30	33.14	5.74	0.68	24.91	305.9	0.096	
17	14.39r	33.24	5.82	-	50	9.25	33.19	5.13	1.44	25.68	232.9	0.150	
36	11.50	33.13	5.64	0.98	75	8.71	33.45	4.15	1.90	25.97	206.0	0.205	
49	9.34	-	5.14	1.42	100	8.60	33.65	2.95	2.22	26.15	189.8	0.254	
77	8.70	33.48	4.02	1.94	150	8.16	33.79	2.42	2.40	26.32	173.7	0.345	
101	8.60	33.66	2.91	2.24	200	7.54	33.87	2.02	2.56	26.48	159.8	0.429	
155	8.10	33.80	2.39	2.42	250	7.00	33.94	1.67	2.73	26.61	148.0	0.505	
313	6.42	34.04	1.23	2.98	300	6.53	34.01	1.32	2.93	26.72	137.2	0.576	
485	5.33	34.27	0.43	3.39	400	5.82	34.19	0.68	3.27	26.96	116.1	0.703	
839	3.84	34.38	0.63	3.42	500	5.24	34.27	0.43	3.39	27.09	104.2	0.813	
					600	4.79	34.32	0.41	3.40	27.18	96.0	0.914	
					700	4.42	34.35	0.42	3.41	27.25	90.4	1.007	
					800	4.08	34.37	0.56	3.42	27.30	85.8	1.095	
					1000	(3.62)	(34.41)	-	-	(27.38)	(79.3)	(1.260)	
HORIZON; October 10, 1949; 0603 GCT; 36°50'N, 124°43'W; sounding, missing; wind, 310°, force 3; weather, cloudy; sea, rough; wire angle, 10°.													603
0	15.2	33.32E	5.80	0.46	0	15.2	33.32	5.80	0.46	24.65	329.8	0.000	
10	15.04	33.32	5.70	0.48	10	15.04	33.32	5.70	0.48	24.69	327.0	0.033	
25	14.91	33.31	5.62	0.48	20	14.93	33.31	5.64	0.48	24.71	325.3	0.065	
49	10.67	33.35	4.86	1.37	30	14.90	33.31	5.55	0.49	24.71	325.2	0.098	
72	9.27	33.57	3.76	1.84	50	10.50	33.36	4.81	1.45	25.61	240.2	0.155	
95	8.66	33.73	2.96	2.02	75	9.16	33.60	3.66	1.88	26.02	201.5	0.210	
141	8.07	33.91	2.33	2.28	100	8.56	33.75	2.85	2.07	26.23	181.7	0.258	
186	7.54	34.02	1.88	2.41	150	7.96	33.93	2.24	2.31	26.46	160.4	0.343	
283	6.58	34.07	1.50	2.64	200	7.38	34.04	1.80	2.44	26.63	144.8	0.420	
380	5.83	34.13	0.93	2.92	250	6.86	34.06	1.60	2.56	26.72	137.2	0.490	
573	5.13	34.27	0.41	3.10	300	6.44	34.08	1.40	2.70	26.79	130.9	0.556	
864	4.03	34.40	0.55	3.11	400	5.72	34.15	0.83	2.95	26.94	117.9	0.681	
1278	3.06	34.51	0.75	3.00	500	5.36	34.23	0.52	3.05	27.04	108.7	0.795	
					600	5.02	34.29	0.41	3.11	27.13	101.1	0.900	
					700	4.60	34.34	0.42	3.11	27.22	93.2	0.997	
					800	4.24	34.38	0.51	3.11	27.29	87.1	1.087	
					1000	3.66	34.44	0.60	3.09	27.40	77.6	1.252	
HORIZON; October 9, 1949; 2347 GCT; 36°37'N, 125°30'W; sounding, 2,700 fm; wind, 320°, force 4; weather, cloudy; sea, rough; wire angle, 55°.													604
0	17.3	33.04E	5.19	0.44	0	17.3	33.04	5.19	0.44	23.96	395.8	0.000	
5	17.29	33.04	5.37	0.44	10	17.29	33.04	5.22	0.42	23.96	395.9	0.040	
14	17.28	33.05	5.16	0.42	20	17.29	33.05	5.12	0.43	23.97	395.4	0.079	
26	17.29	33.06	5.09	0.44	30	17.26	33.07	5.15	0.44	23.99	393.7	0.119	
36	17.12	33.10	5.33	0.45	50	15.60	32.95	5.78	0.46	24.28	366.6	0.195	
58	12.96	32.94	5.84	0.48	75	11.72	32.95	5.79	0.56	25.07	291.8	0.277	
121	9.56	33.03	5.23	1.04	100	10.37	32.98	5.61	0.76	25.34	266.9	0.347	
194	8.05	33.78	3.20	2.04	150	8.78	33.28	4.06	1.47	25.83	220.7	0.468	
242	7.56	33.95	2.90	2.21	200	7.97	33.82	3.17	2.06	26.37	169.6	0.567	
289	6.89	33.99	2.30	2.52	250	7.47	33.96	2.81	2.25	26.56	152.8	0.647	
433	5.60	34.07	0.96	2.95	300	6.73	34.00	2.09	2.56	26.69	140.5	0.720	
682	4.52	34.35	0.49	3.31	400	5.83	34.04	1.12	2.87	26.84	127.4	0.854	
899	4.03	34.43	0.49	3.29	500	5.18	34.15	0.71	3.11	27.00	112.2	0.973	
					600	4.73	34.28	0.55	3.27	27.16	98.3	1.079	
					700	4.48	34.36	0.49	3.31	27.25	90.2	1.173	
					800	4.27	34.40	0.49	3.31	27.30	85.8	1.261	
					1000	(3.84)	(34.45)	-	-	(27.39)	(79.0)	(1.426)	

E See footnote page 260.

SIO

CCOFI

4910

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

605 HORIZON; October 9, 1949; 1717 GCT; 36°24'N, 126°17'W; sounding, missing; wind, 350°, force 5; weather, cloudy; sea, high; wire angle, 33°.

0	17.5	33.15E	5.17	0.51	0	17.5	33.15	5.17	0.51	24.00	392.5	0.000
8	17.49	33.15	5.19	0.52	10	17.49	33.15	5.20	0.52	24.00	392.5	0.039
21	17.47	33.13	5.35	0.52	20	17.47	33.13	5.33	0.52	23.99	393.7	0.079
44	17.49	33.13	5.28	0.53	30	17.47	33.13	5.32	0.52	23.99	394.0	0.118
67	13.09	33.00	6.03	0.56	50	17.49	33.12	5.65	0.54	23.98	395.8	0.197
88	11.62	33.06	5.55	0.62	75	12.35	33.01	5.97	0.58	25.00	298.8	0.284
129	9.55	33.06	5.44	1.14	100	10.81	33.06	5.50	0.67	25.32	268.4	0.355
163	8.43	33.60	4.07	1.93	150	8.80	33.51	4.35	1.85	26.00	204.1	0.472
321	6.76	34.03	2.11	2.49	200	7.83	33.75	3.60	2.03	26.34	172.9	0.567
514	5.41	34.15	0.76	3.12	250	7.30	33.87	2.96	2.18	26.51	157.1	0.649
803	4.36	34.34	0.46	3.20	300	6.94	34.00	2.37	2.37	26.66	143.5	0.724
1212	3.32	34.49	0.90	3.18	400	6.12	34.09	1.40	2.87	26.84	127.2	0.859
					500	5.49	34.14	0.82	3.11	26.96	116.8	0.981
					600	5.07	34.21	0.57	3.16	27.06	107.6	1.094
					700	4.70	34.29	0.48	3.18	27.17	98.0	1.196
					800	4.37	34.34	0.46	3.20	27.25	91.4	1.291
					1000	3.79	34.42	0.60	3.20	27.37	80.5	1.463

609 HORIZON; October 8, 1949; 2103 GCT; 35°31'N, 129°24'W; sounding, missing; wind, 360°, force 6; weather, cloudy; sea, very high; wire angle, 26°.

0	18.8	33.16E	5.39	0.42	0	18.8	33.16	5.39	0.42	23.69	422.0	0.000
8	18.77	33.22	5.20	0.28	10	18.76	33.22	5.20	0.29	23.74	417.0	0.042
21	18.74	33.16	5.30	0.38	20	18.74	33.16	5.30	0.37	23.70	421.3	0.084
43	18.72	33.17	5.25	0.40	30	18.73	33.16	5.24	0.39	23.70	421.4	0.126
64	18.14	33.13	5.55	0.42	50	18.73	33.17	5.32	0.40	23.71	421.2	0.210
103	12.01	33.20	5.66	0.55	75	16.05	33.14	5.63	0.44	24.33	363.3	0.308
155p	9.14	33.62	4.72r	1.24r	100	12.45	33.19	5.65	0.53	25.12	288.0	0.390
217	8.15	33.82	4.56	1.43	150	9.23	33.59	5.43	0.92	26.00	204.8	0.513
350	6.24	33.96	2.42	2.08	200	8.35	33.78	4.83	1.32	26.29	178.0	0.608
438	5.43	34.02	1.42	2.46	250	7.66	33.87	4.01	1.59	26.46	162.3	0.694
639p	4.24	34.16	0.56	2.82	300	6.90	33.93	3.20	1.84	26.61	148.2	0.771
1128p	3.37	34.43	0.77	2.84	400	5.72	34.00	1.81	2.32	26.82	128.9	0.910
1503p	2.69	34.54	1.17	2.82	500	4.92	34.06	0.99	2.64	26.96	115.9	1.032
					600	4.36	34.12	0.59	2.80	27.07	106.0	1.143
					700	4.13	34.22	0.58	2.82	27.18	96.7	1.244
					800	3.96	34.31	0.60	2.83	27.26	89.0	1.337
					1000	3.60	34.40	0.68	2.84	27.37	79.8	1.506

610 HORIZON; October 8, 1949; 1322 GCT; 35°18'N, 130°11'W; sounding, 2,800 fm; wind, 010°, force 4; weather, cloudy; sea, high; wire angle, 52°.

0	18.8	33.12E	5.28	0.46	0	18.8	33.12	5.28	0.46	23.66	424.9	0.000
6	18.80	33.13	-	0.44	10	18.78	33.13	5.30	0.43	23.67	424.0	0.042
16	18.78	33.13	5.30	0.38	20	18.78	33.13	5.27	0.38	23.67	424.3	0.085
28	18.81	33.13	5.19	0.36	30	18.80	33.13	5.20	0.36	23.67	425.1	0.127
33	18.80	33.15	5.27	0.36	50	14.50	33.42	5.95	0.31	24.88	309.5	0.201
42	15.41	33.42	5.96	0.32	75	13.16	33.37	5.74	0.33	25.12	287.3	0.275
79	13.06	33.37	5.68	0.34	100	12.58	33.37	5.43	0.48	25.23	277.0	0.346
153	10.03	33.45	-	0.96	150	10.38	33.44	4.79	0.93	25.69	234.3	0.473
223	7.93	33.90	4.00	1.54	200	8.27	33.85	4.16	1.37	26.35	171.7	0.576
301	7.04	33.96	3.72	1.80	250	7.59	33.92	3.91	1.64	26.51	157.5	0.657
353p	6.43	34.01	2.53	2.08	300	7.04	33.96	3.73	1.79	26.62	147.8	0.733
922p	3.79	34.42	0.38	2.84	400	6.07	34.05	1.90	2.32	26.82	129.5	0.872
1076p	3.37	34.49	0.29	2.78	500	5.42	34.13	1.19	2.60	26.96	116.8	0.995
					600	4.92	34.21	0.79	2.74	27.08	105.8	1.107
					700	4.52	34.29	0.60	2.82	27.19	96.0	1.208
					800	4.18	34.36	0.49	2.84	27.28	87.7	1.299
					1000	3.57	34.46	0.33	2.81	27.42	75.1	1.462

E See footnote page 260.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

HORIZON; October 12, 1949; 0255 GCT; 36°35'N, 122°14'W; sounding, 1,000 fm; wind, 310°, force 4; weather, partly cloudy; sea, rough; wire angle, 45°. 661

0	15.2	33.12E	5.71	0.38	0	15.2	33.12	5.71	0.38	24.51	343.8	0.000	
7	15.16	33.08	5.74	0.40	10	15.16	33.08	5.71	0.40	24.48	346.9	0.035	
18	15.13	33.08	5.63	0.41	20	15.12	33.07	5.63	0.41	24.48	347.0	0.069	
35	-	32.88	5.69	0.64	30	14.70	32.90	5.68	0.56	24.44	351.1	0.104	
53	10.49	32.90	4.59	0.75	50	11.05	32.89	4.60	0.71	25.15	284.1	0.168	
70	9.62	32.97	4.92	1.10	75	9.61	33.06	4.82	1.28	25.52	248.7	0.234	
94	9.52	33.49	3.99	1.70	100	9.44	33.57	3.50	1.79	25.95	208.6	0.291	
118	9.11	33.73	2.86	1.98	150	8.52	33.87	2.56	2.10	26.33	173.3	0.387	
170	8.20	33.91	2.48	2.14	200	7.77	33.94	2.41	2.18	26.50	157.8	0.469	
223	7.49	33.95	2.39	2.21	250	7.19	33.96	2.35	2.27	26.60	148.9	0.546	
328	6.56	34.04	2.09	2.54	300	6.75	34.00	2.24	2.42	26.69	140.9	0.619	
489	5.81	34.22	0.57	3.04	400	6.25	34.13	1.20	2.82	26.86	126.0	0.752	
700	4.71	34.34	0.94	3.18	500	5.73	34.23	0.57	3.05	27.00	113.3	0.872	
					600	5.14	34.29	0.67	3.14	27.12	102.6	0.980	
					700	4.71	34.34	0.94	3.18	27.21	94.6	1.078	

HORIZON; October 12, 1949; 1035 GCT; 35°41'N, 121°50'W; sounding, 600 fm; wind, 320°, force 4; weather, partly cloudy; sea, rough; wire angle, 21°. 701

0	12.1	33.04E	6.16	0.72	0	12.1	33.04	6.16	0.72	25.07	290.4	0.000	
9	12.09	32.95	6.10	0.74	10	12.08	32.95	6.10	0.74	25.00	296.7	0.029	
21	12.01	33.03	5.99	0.78	20	12.02	33.03	6.00	0.78	25.08	290.0	0.059	
41	-	32.94	5.83	1.05	30	11.60	32.98	5.94	0.85	25.12	286.5	0.088	
60	10.13	33.44	4.53	1.67	50	10.30	33.04	5.65	1.35	25.39	260.7	0.142	
79	10.11	33.68	3.10	2.16	75	10.13	33.63	3.26	2.08	25.88	214.7	0.202	
116	9.54	33.84	2.22	2.46	100	9.81	33.78	2.47	2.40	26.05	199.1	0.253	
154	9.26	33.95	2.12	2.36	150	9.29	33.94	2.14	2.37	26.26	179.6	0.348	
232	8.56	34.04	1.92	2.70	200	8.88	34.01	2.05	2.52	26.38	169.1	0.435	
312	7.67	34.13	1.08	3.02	250	8.36	34.06	1.82	2.79	26.51	158.2	0.517	
480	6.21	34.22	0.55	3.30	300	7.78	34.12	1.20	2.98	26.64	146.3	0.593	
753	4.72	34.40	0.39	3.46	400	6.84	34.19	0.70	3.20	26.82	129.5	0.731	
					500	6.05	34.23	0.55	3.32	26.96	117.3	0.854	
					600	5.40	34.32	0.47	3.40	27.11	103.7	0.965	
					700	4.92	34.38	0.43	3.44	27.22	94.1	1.064	

HORIZON; October 12, 1949; 1706 GCT; 35°25'N, 122°35'W; sounding, 2,050 fm; wind, 330°, force 7; weather, low fog; sea, very high; wire angle, 48°. 702

0	16.4	33.08E	5.48	0.52	0	16.4	33.08	5.48	0.52	24.20	372.9	0.000	
6	16.19	33.17	5.35	0.52	10	16.18	33.16	5.35	0.52	24.31	362.8	0.037	
17	16.16	33.08	5.45	0.52	20	16.16	33.07	5.45	0.52	24.25	369.0	0.073	
33	-	33.06	5.50	0.52	30	14.85	33.06	5.49	0.52	24.53	342.4	0.109	
50	12.11	32.97	5.73	0.87	50	12.11	32.97	5.73	0.87	25.01	296.9	0.173	
78	10.35	33.15	5.10	1.36	75	10.46	33.11	5.28	1.30	25.42	258.5	0.242	
146	9.02	33.78	2.39	2.41	100	9.70	33.45	3.75	1.80	25.81	221.4	0.302	
230	8.51	33.93	1.30	2.68	150	9.00	33.79	2.32	2.43	26.19	186.3	0.404	
289	8.18	34.09	1.20	2.75	200	8.69	33.88	1.52	2.64	26.31	175.7	0.494	
344	7.28	34.11	1.14	2.95	250	8.39	33.99	1.25	2.69	26.45	163.9	0.579	
519	5.88	34.18	0.42	3.33	300	8.08	34.10	1.20	2.77	26.58	152.2	0.659	
778	4.15	34.29	0.54	3.38	400	6.78	34.13	1.00	3.11	26.79	133.1	0.801	
1066	3.65	34.42	0.63	3.37	500	6.03	34.17	0.48	3.31	26.92	121.5	0.929	
					600	5.11	34.21	0.45	3.36	27.06	108.1	1.044	
					700	4.41	34.26	0.50	3.37	27.18	96.8	1.146	
					800	4.09	34.30	0.55	3.38	27.24	91.0	1.240	
					1000	3.72	34.40	0.62	3.37	27.36	81.1	1.412	

E See footnote page 260.

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
705	HORIZON; October 18, 1949; 2316 GCT; 34°39'N, 124°48'W; sounding, missing; wind, 320°, force 5; weather, partly cloudy; sea, high; wire angle, 45°.											
0	16.1	33.08E	5.80	0.52	0	16.1	33.08	5.80	0.52	24.27	366.5	0.000
7	16.06	33.04	5.24	0.54	10	16.05	33.04	5.23	0.55	24.25	368.7	0.037
17	16.04	33.06	5.19	0.55	20	16.05	33.06	5.15	0.55	24.26	367.7	0.074
33	16.05	33.03	5.00	0.51	30	16.05	33.03	5.03	0.52	24.24	370.0	0.110
49	15.89	33.15	4.95	0.52	50	15.88	33.15	4.95	0.52	24.37	358.1	0.183
63	15.49	33.13	5.41	0.52	75	14.38	33.12	5.62	0.52	24.68	329.6	0.269
97	12.44	33.13	5.75	0.53	100	12.25	33.13	5.73	0.54	25.11	288.5	0.347
129	10.30	33.24	4.81	1.28	150	9.46	33.45	4.33	1.52	25.85	218.7	0.473
193	8.48	33.75	3.64	1.88	200	8.33	33.78	3.54	1.93	26.29	177.8	0.573
257	7.47	33.93	2.78	2.27	250	7.53	33.92	2.87	2.24	26.52	156.7	0.656
386	5.90	34.02	1.76	2.62	300	6.88	33.96	2.42	2.41	26.64	145.6	0.731
667	4.62	34.29	0.52	2.99	400	5.77	34.03	1.64	2.65	26.84	127.3	0.868
932	3.92	34.40	0.57	3.06	500	5.19	34.16	0.91	2.82	27.01	111.6	0.987
					600	4.81	34.25	0.54	2.93	27.12	101.6	1.094
					700	4.53	34.31	0.52	3.01	27.20	94.6	1.192
					800	4.25	34.35	0.54	3.04	27.27	89.3	1.284
					1000	(3.76)	(34.42)	-	-	(27.37)	(80.0)	(1.453)
706	HORIZON; October 18, 1949; 1630 GCT; 34°23'N, 125°33'W; sounding, 2,600 fm; wind, 340°, force 3; weather, cloudy; sea, high; wire angle, 48°.											
0	16.7	33.19E	5.56	0.38	0	16.7	33.19	5.56	0.38	24.22	371.4	0.000
7	16.65	33.21	5.39	0.42	10	16.65	33.22	5.37	0.42	24.25	368.5	0.037
17	16.63	33.24	5.33	0.41	20	16.64	33.24	5.32	0.41	24.27	367.3	0.074
34	16.69	33.22	5.27	0.41	30	16.69	33.23	5.29	0.40	24.25	369.1	0.111
50	16.64	33.21	5.29	0.42	50	16.64	33.21	5.29	0.42	24.24	370.4	0.185
45p	16.68	33.21	5.20	0.44	75	15.36	33.21	5.20	0.55	24.54	343.2	0.274
167	10.22	33.46	4.49	1.31	100	13.49	33.23	5.03	0.76	24.95	304.5	0.355
272	7.71	34.04	2.76	2.08	150	11.87	33.37	4.64	1.18	25.37	265.0	0.497
345	6.88	34.11	1.63	2.53	200	9.25	33.72	4.07	1.58	26.10	196.2	0.612
422	6.30	34.20	0.98	2.78	250	8.09	34.01	3.22	1.94	26.50	158.2	0.701
664	4.86	34.34	0.46	3.05	300	7.34	34.06	2.28	2.25	26.65	144.5	0.776
1010	3.83	34.50	0.63	3.08	400	6.45	34.18	1.13	2.73	26.87	124.8	0.911
1295	3.19	34.58	0.95	2.92	500	5.75	34.25	0.67	2.90	27.01	112.2	1.030
					600	5.14	34.31	0.50	3.01	27.13	101.1	1.136
					700	4.74	34.36	0.48	3.05	27.22	93.4	1.233
					800	4.41	34.41	0.52	3.06	27.30	86.8	1.323
					1000	3.86	34.50	0.63	3.08	27.43	75.5	1.486
707	HORIZON; October 18, 1949; 0820 GCT; 34°07'N, 126°17'W; sounding, missing; wind, 020°, force 7; weather, partly cloudy; sea, high; wire angle, 44°.											
0	16.9	33.25E	5.48	0.37	0	16.9	33.25	5.48	0.37	24.22	371.6	0.000
7	16.82	33.25	5.52	0.42	10	16.81	33.25	5.52	0.43	24.24	369.9	0.037
18	16.79	33.25	5.46	0.42	20	16.80	33.25	5.45	0.42	24.24	369.9	0.074
36	16.85	33.25	5.55	0.40	30	16.85	33.25	5.53	0.40	24.23	371.3	0.111
54	16.79	33.25	5.53	0.44	50	16.79	33.25	5.55	0.42	24.24	370.4	0.185
85	12.79	33.15	5.88	0.60	75	13.65	33.16	5.79	0.66	24.86	312.4	0.271
180	8.68	33.93	2.52	2.19	100	11.85	33.20	5.62	1.04	25.24	276.1	0.344
288	6.52	34.00	2.31	2.42	150	9.60	33.84	3.70	1.87	26.13	192.1	0.461
360	5.56	34.05	1.43	2.78	200	8.16	33.94	2.43	2.25	26.44	163.3	0.550
1110	3.45	34.43	0.87	3.12	250	7.13	33.97	2.36	2.34	26.61	147.5	0.628
1446	2.82	34.58	1.16	3.06	300	6.34	34.01	2.16	2.46	26.75	134.8	0.699
					400	5.27	34.07	1.08	2.92	26.93	118.2	0.824
					500	4.94	34.13	0.72	3.10	27.01	111.0	0.940
					600	4.62	34.23	0.65	3.14	27.13	100.7	1.046
					700	4.32	34.32	0.66	3.14	27.23	91.5	1.142
					800	4.06	34.37	0.70	3.14	27.28	87.8	1.231
					1000	3.63	34.41	0.80	3.13	27.38	79.4	1.398

E See footnote page 260.

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

HORIZON; October 18, 1949; 0124, 0200 GCT; 33°51'N, 127°02'W; sounding, 2,450 fm; wind, 020°, force 6; weather, cloudy; sea, high; wire angle, 45°, 59°. 708

0	17.5	33.17E	5.32	0.48	0	17.5	33.17	5.32	0.48	24.00	392.2	0.000
7	17.55	33.22	4.78	0.52	10	17.54	33.22	4.85	0.51	24.04	388.6	0.039
16	17.53	33.19	5.20	0.48	20	17.53	33.18	5.24	0.47	24.02	391.5	0.078
31	17.57	33.17	5.29	0.47	30	17.57	33.17	5.28	0.47	24.00	393.5	0.117
46	17.58	33.17	5.36	0.48	50	17.33	33.16	5.40	0.49	24.05	389.1	0.196
73	11.89	32.95	5.73	0.64	75	11.75	32.95	5.73	0.66	25.07	292.1	0.281
152	8.65	33.51	3.91	1.72	100	10.18	33.02	5.32	0.99	25.40	261.0	0.350
241	7.58	34.04	2.12	2.22	150	8.73	33.47	3.97	1.69	25.99	205.8	0.466
303	7.00	34.04	1.71	2.53	200	8.10	33.93	2.87	2.02	26.44	163.3	0.559
395	6.05	34.05	1.17	2.74	250	7.53	34.04	2.03	2.26	26.61	147.7	0.636
					300	7.05	34.05	1.73	2.51	26.69	141.2	0.709
502	5.42	34.13	0.63	2.92	400	6.02	34.05	1.14	2.75	26.82	128.9	0.843
810	4.07	34.42	0.53	3.05	500	5.43	34.12	0.63	2.92	26.95	117.5	0.967
1084	3.49	34.42	0.57	2.95	600	4.91	34.24	0.56	3.00	27.10	103.6	1.077
					700	4.50	34.36	0.54	3.03	27.25	90.5	1.174
					800	4.14	34.42	0.53	3.05	27.33	82.7	1.261
					1000	3.66	34.42	0.55	3.00	27.38	79.0	1.423

HORIZON; October 17, 1949; 1805 GCT; 33°35'N, 127°46'W; sounding, missing; wind, 030°, force 5; weather, overcast; sea, high; wire angle, 34°. 709

0	18.0	33.24E	5.18	0.39	0	18.0	33.24	5.18	0.39	23.95	397.4	0.000
6	17.98	33.24	5.05	0.40	10	17.95	33.24	5.06	0.40	23.96	396.5	0.040
20	17.93	33.33	5.13	0.39	20	17.93	33.33	5.13	0.39	24.03	389.9	0.079
41	18.01	33.26	5.15	0.36	30	17.95	33.31	5.15	0.37	24.01	392.1	0.118
63	14.51	33.17	5.78	0.39	50	18.00	33.22	5.18	0.37	23.93	400.4	0.197
102[a)]	12.72	33.22	5.61	0.61	75	13.78	33.15	5.36	0.43	24.82	315.6	0.287
220	8.56	33.75	3.73	1.79	100	12.83	33.21	5.61	0.60	25.06	293.4	0.363
357	6.73	33.96	1.76	2.60	150	10.32	33.47	5.10	1.10	25.72	231.1	0.494
448	5.90	34.05	1.05	2.86	200	8.99	33.70	4.09	1.60	26.12	193.6	0.601
540	5.09	34.05	0.90	2.96	250	8.04	33.80	3.20	2.03	26.35	173.1	0.692
817	3.98	34.38	0.40	3.12	300	7.35	33.88	2.45	2.35	26.51	157.8	0.774
1195	3.16	34.42	0.77	3.09	400	6.34	34.01	1.36	2.74	26.75	136.1	0.922
1488	2.69	34.56	1.17	2.89	500	5.41	34.05	0.95	2.93	26.90	122.7	1.051
					600	4.74	34.10	0.82	3.01	27.01	111.9	1.168
					700	4.34	34.26	0.61	3.08	27.18	96.1	1.272
					800	4.03	34.38	0.41	3.12	27.31	84.5	1.363
					1000	3.52	34.40	0.52	3.12	27.38	78.9	1.527

a) Nansen bottle may have pretripped about 30 meters higher.

E See footnote page 260.

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

710 HORIZON; October 17, 1949; 0758, 1000 GCT; 33°19'N, 128°32'W; sounding, 2,600 fm; wind, 010°, force 5; weather, cloudy; sea, high; wire angle, 44°, 48°.

0	18.5	33.49E	5.45	0.35	0	18.5	33.49	5.45	0.35	24.00	392.0	0.000
7	18.54	33.49	5.47	0.37	10	18.53	33.49	5.46	0.37	24.01	391.9	0.039
19	18.53	33.49	5.41	0.38	20	18.52	33.49	5.40	0.38	24.01	391.9	0.078
36	-	33.53	5.38	0.36	30	18.51	33.49	5.38	0.37	24.01	392.1	0.118
55	18.41	33.89	5.57	0.28	50	18.50	33.84	5.53	0.30	24.28	367.2	0.194
88	15.28	33.93	5.74	0.27	75	16.55	33.93	5.70	0.26	24.82	316.3	0.279
183	10.38	33.69	4.86	1.02	100	14.39	33.93	5.71	0.30	25.30	271.1	0.352
294	7.81	33.97	3.92	1.78	150	11.53	33.76	5.24	0.65	25.73	230.5	0.478
369	7.01	34.02	3.03	2.17	200	9.86	33.71	4.71	1.19	25.98	207.4	0.588
446	5.98	34.09	1.37	2.87	250	8.62	33.90	4.30	1.54	26.34	174.2	0.683
678	4.47	34.27	0.48	3.24	300	7.73	33.98	3.85	1.81	26.53	156.0	0.765
1012	3.54	34.45	0.59	3.29	400	6.65	34.05	2.36	2.46	26.74	137.2	0.912
1289	2.98	34.54r	1.02	3.23	500	5.50	34.14	1.03	3.05	26.96	116.9	1.039
					600	4.85	34.21	0.62	3.19	27.09	104.9	1.150
1189	3.15	34.47	0.89	3.14r	700	4.38	34.28	0.49	3.25	27.20	95.0	1.250
1365	2.87	34.49	1.00r	3.10r	800	4.05	34.35	0.50	3.27	27.29	87.7	1.341
1666	2.48	34.51	1.41	3.14	1000	3.57	34.44	0.59	3.28	27.41	76.6	1.505
2131	1.94	34.58	1.91	2.97	1200	3.13	34.47	0.91	3.26	27.47	70.6	1.653
2618	1.73	34.47r	2.14	2.94	1500	2.70	34.50	1.22	3.18	27.54	65.4	1.857
3108	1.59	34.58	2.70	2.80	2000	2.05	34.56	1.78	3.02	27.64	55.7	2.159
					2500	1.78	34.59	2.10	2.94	27.68	51.8	2.429
					3000	1.62	34.58	2.55	2.86	27.69	51.9	2.688

801 HORIZON; October 14, 1949; 1126 GCT; 33°50'N, 120°40'W; sounding, 1,200 fm; wind, 040°, force 2; weather, fog; sea, moderate; wire angle, 0°.

0	14.1	33.49E	6.12	0.52	0	14.1	33.49	6.12	0.52	25.02	295.1	0.000
10	13.54	33.51	5.60	0.76	10	13.54	33.51	5.60	0.76	25.15	282.7	0.029
25	13.14	33.42	5.52	0.87	20	13.25	33.44	5.55	0.83	25.16	282.7	0.057
50	10.41	33.51	3.84	1.54	30	12.95	33.42	5.50	0.93	25.20	278.7	0.085
75	9.24	33.77	3.14	1.90	50	10.41	33.51	3.84	1.54	25.74	227.7	0.136
100	8.94	33.78	3.20	2.04	75	9.24	33.77	3.14	1.90	26.14	190.2	0.188
147	8.55	33.95	2.14	2.28	100	8.94	33.78	3.20	2.04	26.19	185.4	0.235
195	8.19	34.13	1.63	2.43	150	8.53	33.98	2.09	2.29	26.41	165.2	0.323
292	7.05	34.13	1.34	2.62	200	8.16	34.13	1.63	2.44	26.59	149.5	0.402
388	6.53	34.14	0.80	2.92	250	7.49	34.13	1.50	2.54	26.69	140.4	0.474
582	5.61	34.18	0.41	3.16	300	6.99	34.13	1.30	2.64	26.76	134.4	0.543
880	4.31	34.34	0.54	3.18	400	6.49	34.14	0.77	2.95	26.83	128.3	0.673
1177	3.36	34.40	0.89	3.08	500	6.05	34.16	0.48	3.11	26.91	122.4	0.799
					600	5.52	34.19	0.41	3.16	26.99	114.8	0.918
					700	5.03	34.24	0.43	3.17	27.09	105.9	1.028
					800	4.62	34.30	0.49	3.18	27.19	97.5	1.129
					1000	3.89	34.37	0.65	3.16	27.32	85.3	1.313

E See footnote page 260.

OBSERVED					INTERPOLATED					COMPUTED			
Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m	
HORIZON; October 14, 1949; 1719 GCT; 33°32'N, 121°22'W; sounding, 2,000 fm; wind, 040°, force 2; weather, overcast; sea, rough; wire angle, 10°.													802
0	16.0	33.32E	5.42	0.50	0	16.0	33.32	5.42	0.50	24.48	346.9	0.000	
10	15.44	33.35	5.42	0.50	10	15.44	33.35	5.42	0.50	24.62	333.2	0.034	
25	14.77	33.33	5.33	0.56	20	14.95	33.34	5.38	0.53	24.72	323.7	0.067	
49	-	33.28	5.19	1.10	30	14.62	33.32	5.30	0.62	24.78	318.7	0.099	
74	10.13	33.44	5.45	1.46	50	12.50	33.28	5.20	1.12	25.18	281.1	0.159	
98	9.52	33.68	3.25	1.87	75	10.10	33.46	5.45	1.48	25.75	226.8	0.222	
137	8.78	33.91	2.49	2.12	100	9.47	33.70	3.10	1.90	26.05	199.4	0.276	
183	8.04	33.98	2.52	2.16	150	8.58	33.94	2.49	2.14	26.38	168.8	0.368	
276	7.03	34.05	1.80	2.52	200	7.84	33.99	2.47	2.18	26.53	155.2	0.448	
370	6.65	34.18	1.00	2.80	250	7.26	34.03	2.09	2.40	26.64	144.8	0.524	
557	5.44	34.31	0.64	2.98	300	6.90	34.08	1.51	2.62	26.73	137.0	0.594	
842	4.38	34.42	0.55	2.98	400	6.50	34.21	0.91	2.86	26.89	123.2	0.724	
1134	3.91	34.48	0.88	2.95	500	5.73	34.28	0.72	2.96	27.04	109.7	0.841	
					600	5.27	34.33	0.60	2.98	27.13	101.2	0.946	
					700	4.88	34.37	0.55	2.98	27.21	94.3	1.044	
					800	4.52	34.41	0.55	2.98	27.29	87.9	1.135	
					1000	3.83	34.46	0.68	2.97	27.40	78.1	1.301	
HORIZON; October 15, 1949; 0159 GCT; 33°15'N, 122°05'W; sounding, missing; wind, 180°, force 2; weather, overcast; sea, very rough; wire angle, 6°.													803
0	17.6	33.33E	5.23	0.43	0	17.6	33.33	5.23	0.43	24.11	381.6	0.000	
10	17.53	33.33	5.26	0.45	10	17.53	33.33	5.26	0.45	24.13	380.3	0.038	
25	17.50	33.33	5.20	0.44	20	17.51	33.33	5.23	0.45	24.13	380.3	0.076	
49	-	33.31	5.43	0.41	30	17.50	33.33	5.21	0.43	24.14	380.3	0.114	
73	11.92	33.12	-	0.58	50	16.65	33.31	5.44	0.41	24.32	363.1	0.188	
96	11.02	33.30	5.14	0.89	75	11.74	33.12	5.34	0.61	25.20	279.6	0.269	
143	9.25	33.66	3.45	1.84	100	10.95	33.35	5.10	0.96	25.52	249.5	0.335	
190	7.94	33.95	3.12	1.96	150	8.90	33.71	3.38	1.87	26.15	190.8	0.445	
287	7.26	34.12	1.47	2.58	200	7.85	33.99	3.01	1.99	26.52	155.3	0.532	
361	6.76	34.21	0.71	2.84	250	7.49	34.07	2.15	2.34	26.64	144.9	0.606	
579	5.36	34.34	0.33	3.10	300	7.18	34.14	1.28	2.63	26.74	136.2	0.677	
872	4.23	34.45	0.47	3.10	400	6.49	34.25	0.57	2.92	26.92	120.1	0.805	
1167	3.49	34.49	0.84	3.08	500	5.83	34.31	0.38	3.04	27.05	108.6	0.919	
					600	5.25	34.35	0.33	3.10	27.15	99.5	1.023	
					700	4.80	34.40	0.35	3.10	27.24	91.3	1.119	
					800	4.44	34.44	0.40	3.10	27.32	84.9	1.207	
					1000	3.86	34.47	0.62	3.10	27.40	77.7	1.369	
HORIZON; October 15, 1949; 0819 GCT; 32°57'N, 122°47'W; sounding, missing; wind, missing; weather, overcast; sea, very rough; wire angle, 11°.													804
0	17.8	33.30E	5.37	0.44	0	17.8	33.30	5.37	0.44	24.05	387.7	0.000	
9	17.76	33.28	4.95	0.46	10	17.76	33.28	4.95	0.47	24.04	389.1	0.039	
24	17.75	33.29	5.15	0.46	20	17.75	33.29	5.43	0.47	24.04	388.6	0.078	
48	-	33.28	5.03	0.49	30	17.75	33.29	5.10	0.46	24.05	388.8	0.117	
72	13.32	33.22	5.59	0.48	50	16.68	33.28	5.05	0.49	24.29	365.9	0.192	
95	13.38	33.46	5.24	0.46	75	13.32	33.23	5.58	0.48	24.98	300.8	0.275	
142	10.71	33.49	4.66	1.07	100	13.36	33.47	5.19	0.46	25.15	284.7	0.349	
187	8.82	33.77	4.12	1.61	150	10.20	33.50	4.56	1.19	25.77	226.8	0.476	
281	7.34	33.95	3.16	2.06	200	8.52	33.83	3.98	1.72	26.30	177.1	0.578	
375	6.01	33.99	1.75	2.75	250	7.72	33.93	3.48	1.92	26.50	158.8	0.661	
567	5.28	34.24	0.52	3.22	300	7.10	33.96	2.95	2.18	26.61	148.5	0.738	
859	4.26	34.42	0.48	3.30	400	5.80	34.00	1.48	2.84	26.81	129.8	0.877	
1154	3.51	34.49	0.88	3.31	500	5.50	34.14	0.78	3.11	26.96	116.9	1.000	
					600	5.16	34.28	0.50	3.75	27.11	103.5	1.111	
					700	4.77	34.36	0.49	3.28	27.22	93.8	1.209	
					800	4.43	34.40	0.49	3.30	27.29	87.6	1.300	
					1000	3.90	34.46	0.56	3.31	27.39	78.9	1.466	

E See footnote page 260.

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

805 HORIZON; October 15, 1949; 1450 GCT;32°40'N, 123°30'W; sounding, 2,400 fm; wind, calm; weather, overcast; sea, very rough; wire angle, 9°.

0	18.3	33.45E	5.21	0.44	0	18.3	33.45	5.21	0.44	24.03	389.0	0.000
10	18.29	33.44	5.21	0.45	10	18.29	33.44	5.21	0.45	24.03	389.6	0.039
24	18.27	33.43	-	0.46	20	18.27	33.43	5.24	0.46	24.03	390.4	0.078
49	-	33.58	5.47	0.40	30	18.26	33.43	5.28	0.45	24.03	390.4	0.117
72	14.22	33.55	5.82	0.44	50	15.95	33.58	5.50	0.40	24.69	328.2	0.189
96	14.01	33.75	5.60	0.44	75	14.19	33.56	5.83	0.44	25.05	293.8	0.267
142	10.89	33.60	4.87	1.02	100	14.00	33.75	5.54	0.44	25.24	276.6	0.338
190	8.93	33.77	4.42	1.49	150	10.43	33.60	4.80	1.11	25.81	223.4	0.462
285	7.44	33.98	2.39	2.28	200	8.66	33.80	4.31	1.57	26.25	181.2	0.564
382	6.13	34.07	1.62	2.68	250	7.85	33.92	3.39	1.97	26.47	161.3	0.650
576	5.07	34.22	0.56	3.08	300	7.24	34.00	2.27	2.38	26.62	147.4	0.726
871	4.19	34.45	0.78	3.18	400	6.00	34.09	1.50	2.72	26.86	125.7	0.863
1168	3.44	34.49	0.86	3.16	500	5.42	34.16	0.81	2.96	26.98	114.6	1.034
					600	4.98	34.24	0.57	3.10	27.10	104.2	1.143
					700	4.64	34.34	0.66	3.15	27.22	93.8	1.242
					800	4.37	34.42	0.74	3.17	27.31	85.5	1.332
					1000	3.86	34.47	0.83	3.18	27.40	77.7	1.495

806 HORIZON; October 15, 1949; 1947 GCT; 32°22'N, 124°13'W; sounding, missing; wind, 320°, force 1; weather, overcast; sea, rough; wire angle, 15°.

0	18.6	33.45E	5.34	0.36	0	18.6	33.45	5.34	0.36	23.96	395.6	0.000
9	18.56	33.44	4.25	0.38	10	18.56	33.44	5.29	0.38	23.96	396.3	0.040
23	18.53	33.44	5.20	0.38	20	18.54	33.44	5.23	0.38	23.96	396.2	0.079
45	-	33.44	5.13	0.38	30	18.53	33.44	5.16	0.38	23.97	396.3	0.119
66	14.57	33.44	5.73	0.38	50	16.70	33.44	5.16	0.38	24.41	354.6	0.194
85	13.95	33.48	5.68	0.43	75	14.20	33.45	5.73	0.40	24.97	301.9	0.276
124	12.90	33.58	5.29	0.56	100	13.64	33.53	5.59	0.48	25.15	285.7	0.349
166	10.27	33.52	4.48	1.37	150	11.07	33.55	4.78	1.03	25.65	238.0	0.480
252	8.24	33.95	3.30	1.96	200	9.39	33.68	3.96	1.67	26.04	201.5	0.591
338	6.79	34.00	2.40	2.37	250	8.29	33.95	3.33	1.96	26.43	165.4	0.682
516	5.30	34.14	0.82	3.01	300	7.37	33.98	2.80	2.20	26.59	150.7	0.761
795	4.27	-	-	-	400	6.07	34.04	1.68	2.63	26.81	130.3	0.901
1086	3.55	34.49	0.72	3.19	500	5.39	34.12	0.89	2.97	26.96	117.0	1.025
					600	4.93	34.22	0.77	3.08	27.09	105.2	1.136
					700	4.56	34.31	0.73	3.12	27.20	94.9	1.236
					800	4.26	34.39	0.72	3.15	27.30	86.4	1.327
					1000	3.73	34.47	0.72	3.18	27.41	76.2	1.489

807 HORIZON; October 16, 1949; 0149 GCT; 32°05'N, 124°55'W; sounding, 2,400 fm; wind, 220°, force 2; weather, overcast; sea, rough; wire angle, 0°.

0	18.6	33.44E	5.25	0.46	0	18.6	33.44	5.25	0.46	23.94	398.1	0.000
10	18.63	33.48	5.21	0.46	10	18.63	33.48	5.21	0.46	23.98	394.7	0.040
25	18.58	33.40	5.05	0.46	20	18.59	33.43	5.11	0.46	23.95	397.9	0.079
48	-	33.48	4.80	0.48	30	18.57	33.40	5.00	0.46	23.93	400.1	0.119
72	14.69	33.39	5.80	0.46	50	16.00	33.48	4.80	0.48	24.60	336.6	0.193
95	14.21	33.44	5.51	0.45	75	14.61	33.39	5.80	0.46	24.84	314.7	0.274
142	12.60	33.54	5.00	0.72	100	14.10	33.46	5.45	0.45	25.00	299.9	0.351
189	9.64	33.55	4.11	1.52	150	12.16	33.54	4.90	0.83	25.45	258.0	0.490
285	7.75	33.96	3.38	1.98	200	9.33	33.57	4.02	1.64	25.97	208.8	0.607
382	6.45	34.00	2.12	2.55	250	8.34	33.92	3.65	1.85	26.40	168.5	0.702
578	4.95	34.16	0.77	3.04	300	7.51	33.97	3.25	2.04	26.56	153.6	0.782
874	4.13	34.40	0.46	3.21	400	6.24	34.01	1.85	2.65	26.76	134.9	0.926
1170	3.29	34.51	0.79	3.08	500	5.38	34.08	1.13	2.93	26.92	120.0	1.054
					600	4.88	34.18	0.71	3.06	27.06	107.5	1.168
					700	4.65	34.27	0.54	3.15	27.16	99.0	1.271
					800	4.39	34.36	0.46	3.20	27.26	90.1	1.365
					1000	3.72	34.45	0.53	3.17	27.40	77.6	1.533

E See footnote page 260.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

HORIZON; October 16, 1949; 0610 GCT; 31°47'N, 125°38'W; sounding, missing; wind, 320°, force 2; weather, overcast; sea, rough; wire angle, 4°. 808

0	18.8	33.46E	5.29	0.34	0	18.8	33.46	5.29	0.34	23.92	400.1	0.000
10	18.74	33.46	5.34	0.36	10	18.74	33.46	5.34	0.36	23.93	399.2	0.040
25	18.70	33.48	5.31	0.36	20	18.71	33.47	5.32	0.36	23.95	398.0	0.080
50	-	33.53	5.59	0.38	30	18.70	33.49	5.34	0.36	23.96	396.5	0.120
74	14.31	33.49	5.80	0.52	50	17.00	33.53	5.59	0.38	24.41	355.0	0.195
98	14.15	33.71	5.58	0.31	75	14.30	33.49	5.80	0.52	24.97	301.4	0.277
148	11.62	33.54	4.93	0.84	100	14.13	33.70	5.55	0.31	25.18	282.9	0.350
194	9.37	33.75	4.50	1.32	150	11.50	33.54	4.90	0.88	25.57	246.2	0.482
292	7.70	34.00	3.42	1.86	200	9.25	33.80	4.44	1.36	26.16	190.3	0.592
390	6.20	34.04	2.03	2.48	250	8.35	33.96	3.92	1.63	26.43	165.7	0.680
586	5.16	33.25	0.55	3.02	300	7.57	34.00	3.32	1.91	26.57	152.1	0.759
879	4.30	34.45	0.45	3.12	400	6.09	34.05	1.92	2.53	26.82	129.8	0.900
1175	3.45	34.54	0.85	3.05	500	5.44	34.13	1.00	2.89	26.96	117.1	1.024
					600	5.12	34.27	0.52	3.02	27.11	103.8	1.134
					700	4.84	34.37	0.45	3.08	27.22	94.0	1.233
					800	4.55	34.42	0.45	3.11	27.29	87.6	1.324
					1000	3.95	34.49	0.55	3.10	27.41	77.3	1.489

HORIZON; October 16, 1949; 1258 GCT; 31°29'N, 126°20'W; sounding, 2,600 fm; wind, 320°, force 2; weather, overcast; sea, moderate; wire angle, 6°. 809

0	18.9	33.49E	5.29	0.44	0	18.9	33.49	5.29	0.44	23.93	399.3	0.000
10	18.81	33.49	5.19	0.46	10	18.81	33.49	5.19	0.46	23.94	398.6	0.040
24	18.75	33.48	5.37	0.46	20	18.77	33.48	5.31	0.46	23.94	398.6	0.080
47	-	33.46	5.35	0.46	30	18.75	33.47	5.37	0.46	23.94	399.2	0.120
70	16.02	33.77	6.00	0.38	50	17.65	33.47	5.36	0.46	24.21	374.0	0.197
93	14.91	33.80	5.95	0.38	75	15.76	33.78	6.00	0.38	24.88	310.0	0.282
140	13.12	33.69	5.35	0.68	100	14.65	33.80	5.88	0.38	25.14	286.2	0.357
187	9.52	33.62	4.30	1.66	150	12.50	33.67	5.15	0.86	25.48	254.7	0.492
283	8.00	34.09	1.91	2.56	200	9.22	33.64	3.98	1.86	26.04	201.8	0.606
380	7.14	34.18	1.11	2.94	250	8.39	34.01	2.67	2.36	26.46	162.4	0.698
573	5.90	34.29	0.56	3.24	300	7.83	34.11	1.70	2.64	26.62	147.8	0.775
867	4.48	34.43	0.49	3.34	400	6.98	34.19	1.02	2.99	26.81	131.3	0.914
1164	3.51	34.51	0.90	3.33	500	6.31	34.25	0.70	3.15	26.94	119.3	1.040
					600	5.75	34.30	0.54	3.26	27.05	109.7	1.154
					700	5.26	34.35	0.50	3.31	27.15	100.7	1.259
					800	4.77	34.40	0.50	3.33	27.25	91.9	1.356
					1000	4.00	34.48	0.60	3.34	27.40	78.6	1.526

HORIZON; October 16, 1949; 1703 GCT; 31°11'N, 127°03'W; sounding, missing; wind, 320°, force 2; weather, overcast; sea, rough; wire angle, 2°. 810

0	19.1	33.57E	5.19	0.44	0	19.1	33.57	5.19	0.44	23.93	398.9	0.000
10	19.07	33.64	5.37	0.45	10	19.07	33.64	5.37	0.45	23.99	393.7	0.040
25	19.04	33.55	5.51	0.45	20	19.05	33.57	5.48	0.45	23.94	398.9	0.079
49	-	33.84	5.67	0.37	30	19.04	33.58	5.55	0.44	23.95	398.3	0.119
73	15.30	33.86	5.49	0.39	50	17.20	33.84	5.66	0.37	24.60	336.8	0.193
97p	15.30	33.91	5.49	0.38	75	15.30	33.86	5.47	0.39	25.05	294.5	0.272
145	13.56	33.82	5.12	0.70	100	15.19	33.91	5.49	0.39	25.11	289.2	0.345
193	9.90	33.78	4.41	1.38	150	13.30	33.81	5.05	0.79	25.43	259.7	0.481
292	7.84	34.00	3.21	2.06	200	9.74	33.79	4.30	1.46	26.07	199.0	0.597
390	6.53	34.05	1.67	2.72	250	8.60	33.93	3.73	1.80	26.37	171.6	0.689
587	5.24	34.21	0.49	3.18	300	7.71	34.01	3.10	2.11	26.56	153.5	0.770
882	4.19	34.43	0.51	3.30	400	6.43	34.05	1.53	2.76	26.77	134.2	0.914
1180	3.43	34.52	0.85	3.21	500	5.72	34.13	0.67	3.06	26.92	120.6	1.042
					600	5.17	34.22	0.49	3.19	27.06	108.1	1.156
					700	4.75	34.31	0.49	3.26	27.18	97.3	1.259
					800	4.41	34.38	0.50	3.28	27.27	89.0	1.352
					1000	3.89	34.48	0.57	3.28	27.41	77.3	1.518

E See footnote page 260.

SIO

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4910

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
871	HORIZON; October 20, 1949; 0430 GCT; 33°00'N, 119°00'W; sounding, 1,057 fm; wind, 290°, force 5; weather, partly cloudy; sea, very rough; wire angle, 36°.											
0	16.0	33.49E	5.68	0.31	0	16.0	33.49	5.68	0.31	24.61	334.5	0.000
8	15.92	33.49	5.60	0.35	10	15.91	33.49	5.59	0.36	24.63	332.8	0.033
20	15.90	33.44	5.53	0.38	20	15.90	33.44	5.53	0.38	24.59	336.5	0.067
41	-	33.40	-	0.62	30	13.65	33.42	5.40	0.44	25.06	292.1	0.098
61	11.24	33.42	4.48	1.18	50	11.97	33.40	4.84	0.83	25.37	262.5	0.154
81	10.31	33.53	3.92	1.65	75	10.56	33.49	4.09	1.60	25.70	232.1	0.216
120	9.52	33.84	2.79	1.82	100	9.85	33.72	3.34	1.75	26.00	203.9	0.270
160	9.03	33.96	2.30	1.98	150	9.16	33.94	2.42	1.94	26.29	177.6	0.365
239	8.08	34.14	1.44	2.33	200	8.52	34.06	1.83	2.16	26.48	159.9	0.449
320	7.39	34.29	0.83	2.62	250	7.97	34.16	1.35	2.38	26.64	145.2	0.526
481	6.22	34.31	0.42	2.75	300	7.55	34.25	0.96	2.56	26.77	133.4	0.595
731	5.01	34.33	0.44	2.80	400	6.79	34.32	0.53	2.71	26.93	119.1	0.722
1016	4.05	34.42	0.57	2.85	500	6.10	34.31	0.43	2.76	27.02	112.0	0.837
					600	5.56	34.31	0.43	2.78	27.08	106.5	0.946
					700	5.14	34.32	0.44	2.80	27.14	101.4	1.050
					800	4.77	34.35	0.46	2.81	27.21	95.6	1.149
					1000	4.10	34.41	0.56	2.85	27.33	84.9	1.329
901	CREST; October 16, 1949; 0746 GCT; 32°36'N, 118°09'W; sounding, 1,080 fm; wind, 340°, force 2; weather, overcast; sea, rough; wire angle, 3°.											
0	18.1	33.66E	4.80		0	18.1	33.66	4.80		24.24	369.5	0.000
10	18.11	33.66	5.03		10	18.11	33.66	5.03		24.24	369.8	0.037
25	12.88	33.40	5.20		20	14.50	33.42	5.18		24.88	308.8	0.071
50	-	33.45	4.28		30	12.23	33.40	5.19		25.32	266.9	0.100
75	9.77	33.51	3.92		50	11.06	33.45	4.28		25.58	243.0	0.151
100	9.23	33.75	3.29		75	9.77	33.51	3.92		25.85	217.8	0.208
150	8.94	34.09	1.96		100	9.23	33.75	3.29		26.12	191.9	0.260
200	8.57	34.15	1.77		150	8.94	34.09	1.96		26.44	164.2	0.348
298	7.48	34.20	1.19		200	8.57	34.15	1.77		26.54	154.0	0.428
396	6.58	34.29	0.61		250	8.01	34.18	1.52		26.65	144.4	0.503
591	5.59	34.36	0.53		300	7.45	34.20	1.16		26.75	135.5	0.572
884	4.30	34.44	0.67		400	6.54	34.29	0.60		26.94	118.1	0.699
1176	3.54	34.51	0.78		500	6.05	34.33	0.55		27.04	109.9	0.813
					600	5.55	34.36	0.54		27.12	102.6	0.920
					700	5.00	34.39	0.60		27.21	94.4	1.017
					800	4.59	34.42	0.65		27.29	88.1	1.110
					1000	3.96	34.47	0.71		27.39	78.9	1.277
901 EXTRA	CREST; October 3, 1949; 2305 GCT; 32°40'N, 118°10'W; sounding, missing; wind, 270°, force 2; weather, partly cloudy; sea, moderate; wire angle, 0°.											
0	20.0	33.79E	5.17		0	20.0	33.79	5.17		23.86	405.7	0.000
10	19.71	33.76	5.41		10	19.71	33.76	5.41		23.91	400.9	0.040
25	16.15	33.53	5.95		20	18.50	33.60	5.91		24.10	383.7	0.080
49	12.36	33.45	5.39		30	15.05	33.48	5.95		24.81	315.9	0.115
74	10.50	33.55	4.20		50	12.32	33.45	5.40		25.34	265.4	0.173
98	9.60	33.71	3.69		75	10.45	33.56	4.18		25.77	225.1	0.234
148	-	33.97	2.52		100	9.56	33.73	3.65		26.06	198.5	0.287
196	8.45	34.11	2.27		150	8.80	33.98	2.50		26.37	169.1	0.379
294	7.87	34.32	1.23		200	8.41	34.12	2.25		26.54	153.9	0.459
392	6.88	34.29	1.35		250	8.13	34.26	1.65		26.69	140.5	0.533
588	5.70	34.38	0.58		300	7.83	34.32	1.25		26.79	132.2	0.601
882	4.40	34.45	0.71		400	6.82	34.29	1.35		26.91	121.8	0.728
1177	3.56	34.56	1.14		500	6.25	34.34	0.95		27.02	111.8	0.845
					600	5.64	34.38	0.58		27.13	102.3	0.952
					700	5.11	34.40	0.60		27.21	95.0	1.050
					800	4.70	34.42	0.65		27.27	89.6	1.143
					1000	4.03	34.50	0.86		27.41	77.5	1.311

E For station 871 see footnote page 260. Evaporation of all salinity samples occurred on Cruise 4910 on stations 901 through 1210. Estimated average corrections to values given here can be made by subtracting 0.038‰ from the value of S, 0.030 from σ_t and by adding 2.8 to $10^5\delta$ at all depths; to ΔD add 0.002 for each 100 meter depth increment.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

CREST; October 16, 1949; 0150 GCT; 32°22'N, 118°50'W; sounding, 575 fm; wind, 340°, force 3; weather, overcast; sea, rough; wire angle, 13°. 902

0	17.78	33.58E	5.12	0	17.78	33.58	5.12	24.25	368.0	0.000
10	17.82	33.64	4.60	10	17.82	33.64	4.60	24.30	363.9	0.037
25	-	33.46	5.21	20	17.07	33.49	5.19	24.36	358.8	0.073
48	11.71	33.46	4.58	30	15.50	33.46	5.19	24.70	326.6	0.107
72	10.57	33.49	4.45	50	11.55	33.46	4.55	25.50	250.9	0.165
96	9.81	33.62	3.36	75	10.53	33.50	4.42	25.71	230.9	0.225
144	8.75	33.98	2.53	100	9.70	33.66	3.20	25.98	205.9	0.280
192	8.48	34.14	2.26	150	8.71	34.01	2.48	26.41	165.5	0.372
288	7.77	34.31	2.16	200	8.42	34.16	2.25	26.57	151.0	0.451
385	6.78	34.27	1.22	250	8.09	34.27	2.20	26.71	138.9	0.524
577	5.82	34.34	0.55	300	7.66	34.31	2.10	26.80	130.5	0.591
867	4.36	34.45	-	400	6.68	34.27	1.10	26.91	121.3	0.717
				500	6.19	34.31	0.65	27.01	113.1	0.834
				600	5.68	34.35	-	27.10	105.0	0.943
				700	5.09	34.39	-	27.21	95.5	1.043
				800	4.62	34.42	-	27.28	88.7	1.135
				1000	(3.98)	(34.49)	-	(27.41)	(75.8)	(1.301)

CREST; October 4, 1949; 0409 GCT; 32°20'N, 118°26'W; sounding, missing; wind, 270°, force 3; weather, overcast; sea, moderate; wire angle, 4°. 902 EXTRA

0	18.4	33.80E	5.17	0	18.4	33.80	5.17	24.28	365.9	0.000
25	16.15	33.60	6.02	10	18.35	33.72	5.75	24.23	370.9	0.037
50	-	33.40	5.08	20	17.52	33.64	6.00	24.37	357.9	0.073
75	10.50	33.60	4.60	30	15.15	33.56	6.01	24.85	312.2	0.107
99	9.44	33.77	3.82	50	12.26	33.40	5.08	25.32	267.8	0.165
147	-	34.02	2.33	75	10.50	33.60	4.60	25.79	223.0	0.226
196	8.24	34.10	2.18	100	9.38	33.78	3.76	26.12	192.1	0.278
292	7.02	34.14	1.59	150	8.64	34.02	2.30	26.43	164.0	0.367
388	6.60	34.27	1.06	200	8.20	34.11	2.17	26.57	151.4	0.445
582	5.26	34.31	0.66	250	7.52	34.13	1.90	26.68	141.0	0.519
873	4.74	34.45	0.50	300	6.98	34.15	1.52	26.77	132.8	0.587
				400	6.52	34.28	1.02	26.94	118.4	0.713
				500	5.82	34.29	0.79	27.03	109.9	0.827
				600	5.20	34.32	0.65	27.13	101.1	0.932
				700	4.99	34.36	0.56	27.19	96.4	1.031
				800	4.84	34.42	0.53	27.26	91.4	1.125

CREST; October 15, 1949; 1840 GCT; 31°47'N, 119°35'W; sounding, 1,650 fm; wind, 300°, force 2; weather, cloudy; sea, very rough; wire angle, 4°. 903

0	16.5	33.37E	5.47	0	16.5	33.37	5.47	24.39	355.5	0.000
10	16.23	33.39	5.80	10	16.23	33.39	5.80	24.48	346.8	0.035
25	16.12	33.40	5.61	20	16.14	33.40	5.75	24.51	344.6	0.070
50	-	33.19	5.10	30	16.12	33.40	5.45	24.52	344.5	0.104
75	10.95	33.37	4.96	50	13.60	33.19	5.10	24.89	308.6	0.170
100	9.95	33.49	4.24	75	10.95	33.37	4.96	25.54	247.4	0.239
149	8.76	33.95	2.59	100	9.95	33.49	4.24	25.80	222.6	0.298
199	8.03	34.05	2.25	150	8.75	33.95	2.58	26.36	170.7	0.397
298	7.15	34.16	1.18	200	8.02	34.05	2.25	26.54	153.7	0.477
386	6.74	34.27	0.70	250	7.50	34.11	1.75	26.67	142.1	0.551
590	5.88	34.31	0.97	300	7.13	34.16	1.17	26.76	134.1	0.620
882	4.46	34.45	0.62	400	6.69	34.28	0.70	26.92	120.6	0.747
1173	3.60	34.54	0.94	500	6.34	34.30	0.85	26.98	116.0	0.866
				600	5.83	34.31	0.96	27.05	109.9	0.979
				700	5.29	34.36	0.86	27.16	100.1	1.084
				800	4.79	34.42	0.74	27.26	90.7	1.179
				1000	4.07	34.49	0.70	27.40	78.6	1.348

E See footnote page 272.

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

904 CREST; October 15, 1949; 1152, 1317 GCT; 31°33'N, 120°12'W; sounding, missing; wind, 270°, force 1; weather, cloudy; sea, rough; wire angle, 4°, 9°.

0	17.7	33.62E	5.47	0	17.7	33.62	5.47	24.31	362.8	0.000
10	17.71	33.62	5.60	10	17.71	33.62	5.60	24.31	363.1	0.036
25	17.24	33.53	5.60	20	17.60	33.58	5.60	24.30	364.0	0.073
49	14.15	33.37	5.70	30	16.80	33.48	5.60	24.42	353.4	0.109
74	10.72	33.35	4.77	50	14.03	33.37	5.70	24.95	302.4	0.174
98	9.89	33.53	4.21	75	10.70	33.35	4.70	25.56	244.8	0.242
147	9.02	33.87	3.21	100	9.82	33.54	4.17	25.86	217.0	0.300
196	8.54	34.04	2.38	150	9.00	33.89	3.15	26.27	178.9	0.399
294	7.42	34.16	1.46	200	8.52	34.05	2.32	26.47	160.7	0.484
391	6.82	34.34	0.92	250	7.83	34.12	1.76	26.63	146.4	0.561
587	5.57	34.42	0.99	300	7.39	34.17	1.43	26.73	136.9	0.632
880	4.35	34.45	0.76	400	6.76	34.34	0.90	26.95	117.2	0.729
1174	3.58	34.58r	1.20	500	6.12	34.40	0.95	27.09	105.6	0.870
				600	5.50	34.42	0.99	27.18	97.5	0.972
976	4.04	34.49	0.83	700	5.00	34.44	0.92	27.26	90.6	1.066
1171	3.54	34.54	0.77r	800	4.61	34.44	0.84	27.30	87.0	1.154
1464	2.87	34.60	1.34	1000	4.02	34.50	0.88	27.41	77.3	1.319
1956	2.08	34.61	1.75	1200	3.52	34.54	1.23	27.49	70.1	1.467
2452	1.80	34.66	1.53	1500	2.80	34.60	1.35	27.61	59.1	1.661
2951	1.68	34.69	1.78	2000	2.03	34.61	1.75	27.68	51.8	1.937
				2500	1.78	34.66	1.55	27.74	46.8	2.185
				3000	(1.68)	(34.69)	(1.84)	(27.77)	(44.9)	(2.414)

905 CREST; October 15, 1949; 0619 GCT; 31°17'N, 120°52'W; sounding, missing; wind, 270°, force 1; weather, cloudy; sea, rough; wire angle, 9°.

0	17.0	33.33E	5.68	0	17.0	33.33	5.68	24.25	368.8	0.000
10	17.03	33.35	5.18	10	17.03	33.35	5.18	24.26	367.5	0.037
25	16.46	33.46	4.88	20	16.60	33.44	4.98	24.43	351.6	0.073
50	14.51	33.33	5.49	30	16.30	33.46	5.02	24.52	344.0	0.108
74	12.33	33.33	5.38	50	14.51	33.33	5.49	24.81	316.3	0.174
98	10.65	33.42	4.59	75	12.25	33.33	5.35	25.27	273.4	0.247
146	9.44	33.86	2.70	100	10.56	33.43	4.40	25.65	237.1	0.311
195	8.86	34.05	1.97	150	9.39	33.88	2.60	26.20	185.6	0.417
293	7.36	34.05	1.47	200	8.81	34.05	1.92	26.43	165.1	0.504
390	6.70	34.23	1.22	250	7.93	34.05	1.60	26.56	153.0	0.583
584	5.56	34.33	0.18	300	7.31	34.06	1.45	26.66	144.0	0.658
877	4.31	34.42	0.87	400	6.64	34.24	1.17	26.89	123.1	0.792
1170	3.50	34.51	0.97	500	6.03	34.31	0.60	27.02	111.2	0.909
				600	5.50	34.33	0.18	27.11	104.2	1.017
				700	5.01	34.35	0.40	27.18	97.5	1.118
				800	4.59	34.39	0.70	27.26	90.3	1.211
				1000	3.94	34.46	0.94	27.38	79.5	1.381

E See footnote page 272.

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CREST; October 15, 1949; 0024 GCT; 31°02'N, 121°32'W; sounding, missing; wind, 270°, force 2; weather, overcast; sea, very rough; wire angle, 8°. 906

OBSERVED					INTERPOLATED					COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m
0	18.2	33.57E	5.71		0	18.2	33.57	5.71		24.14	379.2	0.000
10	18.04	33.57	5.47		10	18.04	33.57	5.47		24.19	374.8	0.038
25	18.02	33.58	5.70		20	18.02	33.58	5.60		24.20	373.7	0.075
50	15.65	33.46	5.98		30	18.02	33.58	5.80		24.20	373.9	0.113
75	12.31	33.39	5.79		50	15.65	33.46	5.98		24.66	330.5	0.183
100	11.26	33.46	4.90		75	12.31	33.39	5.79		25.30	270.3	0.258
148	9.39	33.69	3.78		100	11.26	33.46	4.90		25.55	246.5	0.323
196	8.33	33.96	3.09		150	9.30	33.70	3.75		26.07	197.6	0.434
293	7.15	34.09	1.85		200	8.25	33.97	3.04		26.45	162.4	0.524
390	6.49	34.22	1.65		250	7.57	34.04	2.30		26.60	148.4	0.601
582	5.32	34.36	0.50		300	7.10	34.10	1.84		26.72	138.2	0.673
879	4.26	34.47	-		400	6.41	34.23	1.62		26.91	120.8	0.803
1176	3.46	34.53	1.02		500	5.78	34.31	1.03		27.06	107.9	0.917
					600	5.23	34.37	0.50		27.17	97.8	1.020
					700	4.83	34.41	0.52		27.25	90.8	1.114
					800	4.50	34.45	0.57		27.32	84.7	1.202
					1000	3.92	34.50	0.77		27.42	76.3	1.362

CREST; October 14, 1949; 1859 GCT; 30°50'N, 122°15'W; sounding, missing; wind, 340°, force 2; weather, overcast; sea, high; wire angle, 14°. 907

0	18.2	33.44E	5.50		0	18.2	33.44	5.50		24.06	386.6	0.000
10	18.16	33.47	4.84		10	18.16	33.47	4.84		24.08	384.6	0.039
25	18.16	33.47	4.91		20	18.16	33.47	4.87		24.08	384.9	0.077
48	15.76	33.35	5.42		30	18.16	33.46	5.00		24.07	386.0	0.116
71	13.53	33.44	5.82		50	15.43	33.35	5.50		24.63	334.0	0.188
95	11.86	33.40	4.96		75	13.20	33.44	5.80		25.17	283.1	0.265
142	9.48	33.64	3.68		100	11.45	33.40	4.75		25.47	254.5	0.332
190	8.82	34.02	2.60		150	9.35	33.78	3.38		26.13	192.4	0.444
286	7.22	34.13	2.42		200	8.70	34.04	2.57		26.43	164.1	0.533
381	6.39	34.22	1.03		250	7.74	34.10	2.48		26.63	146.4	0.610
573	5.13	34.34	0.45		300	7.09	34.14	2.39		26.75	134.9	0.681
860	4.10	34.49	0.54		400	6.24	34.24	0.89		26.94	117.8	0.807
1268	3.16	34.58	1.18		500	5.54	34.30	0.52		27.08	105.7	0.919
					600	5.00	34.36	0.45		27.19	95.5	1.020
					700	4.61	34.42	0.47		27.28	87.5	1.111
					800	4.28	34.47	0.50		27.36	80.8	1.195
					1000	3.70	34.52	0.69		27.46	72.1	1.348

CREST; October 14, 1949; 1330 GCT; 30°30'N, 122°55'W; sounding, missing; wind, 340°, force 2; weather, overcast; sea, high; wire angle, 8°. 908

0	18.3	33.51E	5.59		0	18.3	33.51	5.59		24.09	383.3	0.000
10	18.25	33.49	5.48		10	18.25	33.49	5.48		24.08	385.3	0.038
25	18.25	33.53	5.21		20	18.25	33.50	5.30		24.08	385.0	0.077
50	15.55	33.37	5.54		30	18.25	33.52	5.21		24.10	383.6	0.115
74	12.54	33.37	5.23		50	15.55	33.37	5.54		24.62	334.9	0.187
99	11.27	33.44	4.66		75	12.54	33.37	5.18		25.24	275.9	0.264
148	9.43	33.73	3.00		100	11.26	33.44	4.60		25.54	248.3	0.329
197	8.60	33.98	3.16		150	9.40	33.73	3.00		26.08	197.0	0.441
294	7.14	34.11	1.89		200	8.54	33.98	3.15		26.41	166.2	0.531
390	6.28	34.22	1.44		250	7.70	34.06	2.50		26.60	148.7	0.610
876	4.20	34.51	0.69		300	7.07	34.12	1.80		26.74	136.3	0.681
1166	3.44	34.58	0.88		400	6.23	34.23	1.40		26.94	118.4	0.809
					500	5.70	34.28	0.78		27.04	109.2	0.923
					600	5.26	34.33	0.71		27.14	101.0	1.028
					700	4.85	34.41	0.69		27.25	91.1	1.124
					800	4.49	34.47	0.69		27.34	83.1	1.211
					1000	3.87	34.54	0.77		27.46	72.7	1.366

E See footnote page 272.

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4910

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

909 CREST; October 14, 1949; 0728, 0800 GCT; 30°11'N, 123°37'W; sounding, missing; wind, 340°, force 3; weather, overcast; sea, high; wire angle, 25°, 22°.

0	18.8	33.44E	4.94	0	18.8	33.44	4.94	23.89	402.7	0.000
10	18.83	33.44	5.15	10	18.83	33.44	5.15	23.89	403.0	0.040
23	18.84	33.44	-	20	18.84	33.44	5.16	23.89	403.3	0.081
46	-	33.51	5.04	30	18.83	33.44	5.10	23.88	403.6	0.121
68	14.46	33.49	5.67	50	17.75	33.51	5.05	24.21	373.5	0.209
91	13.92	33.60	5.59	75	14.19	33.50	5.68	25.01	298.1	0.293
136	11.02	33.58	5.47	100	13.48	33.60	5.54	25.23	277.4	0.365
182	9.29	33.73	4.29	150	10.35	33.60	5.36	25.82	222.0	0.489
				200	8.87	33.86	4.00	26.27	180.0	0.590
267	7.85	34.04	3.35	250	8.03	34.02	3.50	26.52	156.5	0.674
352	6.65	34.09	1.48	300	7.44	34.06	2.75	26.64	146.0	0.749
530	5.49	34.28	0.63	400	6.29	34.14	1.03	26.86	125.9	0.885
808	4.27	34.45	0.56	500	5.66	34.25	0.66	27.02	111.0	1.004
1215	3.31	34.54	0.81	600	5.11	34.34	0.60	27.16	98.4	1.108
				700	4.66	34.40	0.58	27.26	89.5	1.202
				800	4.30	34.45	0.58	27.34	82.4	1.288
				1000	3.76	34.50	0.65	27.44	74.3	1.445

910 CREST; October 14, 1949; 0228 GCT; 29°54'N, 124°13'W; sounding, missing; wind, 320°, force 5; weather, overcast; sea, high; wire angle, 17°.

0	19.2	33.58E	4.89	0	19.2	33.58	4.89	23.90	401.6	0.000
10	19.21	33.59	5.19	10	19.21	33.59	5.19	23.91	401.6	0.040
25	19.22	33.61	5.18	20	19.23	33.60	5.18	23.91	401.4	0.080
48	18.06	33.73	5.29	30	19.23	33.62	5.19	23.94	400.2	0.120
72	15.55	33.78	5.69	50	17.50	33.74	5.34	24.45	350.9	0.196
96	14.96	33.82	5.63	75	15.40	33.79	5.69	24.97	301.7	0.277
143	12.20	33.63	5.07	100	14.87	33.82	5.58	25.11	289.2	0.351
190	9.52	33.73	5.00	150	11.70	33.63	5.05	25.60	243.1	0.484
283	7.70	34.00	3.04	200	9.21	33.76	4.96	26.13	192.7	0.593
376	6.62	34.26	1.39	250	8.19	33.90	4.00	26.40	167.7	0.683
563	5.39	34.11r	0.83	300	7.47	34.05	2.60	26.63	146.9	0.761
858	4.21	34.44	0.60	400	6.43	34.28	1.22	26.95	117.3	0.894
1264	3.28	34.55	0.97	500	5.74	34.30	0.93	27.05	108.3	1.006
				600	5.20	34.33	0.78	27.14	100.4	1.111
				700	4.76	34.38	0.68	27.23	92.2	1.207
				800	4.40	34.42	0.60	27.31	85.8	1.296
				1000	3.84	34.49	0.68	27.42	75.9	1.457

E See footnote page 272.

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

CREST; October 13, 1949; 1933, 2053 GCT; 29°38'N, 124°48'W; sounding, missing; wind, 360°, force 5; weather, cloudy; sea, very high; wire angle, 15°, 25°. 911

0	19.6	33.72E	4.95	0	19.6	33.72	4.95	23.90	401.4	0.000
10	19.58	33.71	5.34	10	19.58	33.71	5.34	23.91	401.4	0.040
25	19.53	33.72	4.87	20	19.54	33.71	4.96	23.92	400.9	0.080
50	19.66	34.25	4.74	30	19.53	33.80	4.82	23.99	394.2	0.120
74	16.56	33.89	6.13	50	19.66	34.25	4.74	24.30	365.8	0.196
99	16.11	34.14	6.21	75	16.55	33.89	6.15	24.79	319.5	0.282
148	12.70	33.76	5.64	100	16.10	34.14	6.21	25.08	292.5	0.358
197	9.62	33.73	4.95	150	12.46	33.76	5.60	25.56	247.5	0.493
292	8.06	34.05	3.43	200	9.57	33.73	4.90	26.05	200.5	0.605
388	6.64	34.09	2.13	250	8.73	33.94	4.10	26.35	172.8	0.699
580	5.20	34.27	0.73	300	7.94	34.06	3.30	26.57	152.9	0.780
868	4.19	34.47	0.89	400	6.43	34.10	2.00	26.81	130.6	0.922
1275	3.20	34.56	1.25	500	5.60	34.20	1.08	26.99	113.9	1.044
				600	5.13	34.29	0.73	27.12	102.4	1.152
921	3.99r	34.49	0.88r	700	4.76	34.37	0.75	27.23	92.9	1.250
1111	3.55	34.54	0.98r	800	4.41	34.44	0.83	27.32	84.5	1.338
1398	2.98	34.57	2.12	1000	3.82	34.51	1.00	27.44	74.3	1.496
1880	2.23	34.61	2.70	1200	3.34	34.56	1.15	27.52	66.4	1.638
2367	1.84	34.67	2.58	1500	2.82	34.57	2.00	27.58	61.6	1.830
3354	1.59	34.68	3.00	2000	2.10	34.63	2.68	27.69	51.2	2.111
				2500	1.78	34.67	2.60	27.75	46.0	2.355
				3000	1.64	34.68	2.82	27.77	45.1	2.583

CREST; October 11, 1949; 0223 GCT; 31°12'N, 117°00'W; sounding, missing; wind, 340°, force 4; weather, partly cloudy; sea, very rough; wire angle, 22°. 1001

0	16.4	33.58E	5.54	0	16.4	33.58	5.54	24.58	336.6	0.000
10	15.95	33.51	5.44	10	15.95	33.51	5.44	24.63	332.2	0.034
23	13.81	33.42	5.85	20	14.60	33.42	5.84	24.86	310.8	0.066
46	-	33.51	4.52	30	12.83	33.45	5.65	25.25	274.2	0.095
70	10.64	33.60	4.12	50	11.27	33.52	4.40	25.60	241.2	0.146
93	10.16	33.68	4.04	75	10.52	33.62	4.10	25.80	221.8	0.204
139	9.60	34.04	2.76	100	10.06	33.72	4.02	25.96	207.2	0.258
186	9.36	34.31	1.58	150	9.50	34.14	2.30	26.39	168.2	0.352
277	8.76	34.33	1.28	200	9.31	34.32	1.50	26.56	152.9	0.432
368	7.77	34.29	1.23	250	9.02	34.34	1.34	26.62	147.7	0.507
548	6.20	34.40	0.88	300	8.52	34.32	1.27	26.68	142.5	0.579
829	4.58	34.49	0.62	400	7.47	34.29	1.20	26.82	130.8	0.716
1121	3.70	34.56	1.04	500	6.60	34.36	0.97	26.99	115.0	0.839
				600	5.80	34.42	0.80	27.14	101.4	0.947
				700	5.18	34.45	0.68	27.24	92.4	1.044
				800	4.71	34.48	0.62	27.32	85.3	1.133
				1000	4.01	34.53	0.77	27.43	75.1	1.294

E See footnote page 272.

SIO

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4910

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

1002 CREST; October 11, 1949; 0721 GCT; 30°56'N, 117°35'W; sounding, 945 fm; wind, 340°, force 4; weather, partly cloudy; sea, rough; wire angle, 0°.

0	17.8	33.58E	5.29	0	17.8	33.58	5.29	24.24	369.1	0.000
10	17.84	33.58	5.47	10	17.84	33.58	5.47	24.24	369.4	0.037
25	16.96	33.53	5.50	20	17.60	33.55	5.50	24.28	366.1	0.074
50	13.07	33.41	5.40	30	16.00	33.49	5.50	24.61	335.4	0.109
75	11.59	33.44	4.76	50	13.07	33.41	5.40	25.16	282.7	0.171
100	10.27	33.55	4.16	75	11.59	33.44	4.76	25.47	253.6	0.238
125p	9.79[a]	34.04	2.58	100	10.27	33.55	4.16	25.80	223.2	0.297
230p	8.58	34.20	1.90	150	9.43	34.11	2.33	26.37	169.5	0.396
337p	7.65	34.25	1.78	200	8.86	34.18	2.02	26.52	156.1	0.477
551p	6.04	34.34	0.86	250	8.38	34.21	1.86	26.62	147.6	0.553
864p	4.36	34.47	0.46	300	7.94	34.23	1.81	26.70	140.6	0.625
1285p	3.17	34.56	1.27	400	7.13	34.27	1.56	26.85	127.6	0.759
				500	6.38	34.32	1.05	26.99	115.0	0.880
				600	5.72	34.36	0.74	27.10	104.8	0.990
				700	5.13	34.41	0.56	27.22	94.6	1.090
				800	4.61	34.45	0.48	27.31	86.3	1.180
				1000	3.90	34.51	0.57	27.43	75.3	1.342

1003 CREST; October 11, 1949; 1230 GCT; 30°36'N, 118°12'W; sounding, missing; wind, 340°, force 2; weather, overcast; sea, rough; wire angle, 12°.

0	17.7	33.49E	5.37	0	17.7	33.49	5.37	24.21	372.3	0.000
10	17.72	33.49	4.99	10	17.72	33.49	4.99	24.20	373.1	0.037
24	17.73	33.49	5.02	20	17.74	33.49	5.00	24.20	373.7	0.075
48	16.02	33.46	5.00	30	17.74	33.49	5.01	24.20	374.0	0.112
72	12.68	33.31	5.29	50	15.85	33.45	5.00	24.61	335.4	0.183
96	11.96	33.37	4.76	75	12.45	33.31	5.28	25.21	278.7	0.260
144	9.58	33.64	3.85	100	11.80	33.38	4.67	25.39	262.0	0.327
192	8.44	33.91	2.75	150	9.36	33.68	3.75	26.05	200.1	0.443
287	7.78	34.17	1.45	200	8.30	33.95	2.60	26.43	164.7	0.534
383	6.82	34.20	1.16	250	7.95	34.10	1.87	26.60	149.2	0.612
575	5.64	34.36	0.85	300	7.70	34.18	1.36	26.70	140.7	0.685
865	4.35	34.47	0.72	400	6.70	34.21	1.13	26.86	125.9	0.818
1157	3.56	34.54	1.23	500	6.07	34.30	0.94	27.01	112.4	0.938
				600	5.52	34.38	0.83	27.14	100.7	1.044
				700	5.05	34.42	0.76	27.23	92.9	1.141
				800	4.60	34.46	0.75	27.32	85.4	1.230
				1000	3.93	34.51	0.87	27.43	75.6	1.391

1004 CREST; October 11, 1949; 1807 GCT; 30°15'N, 118°50'W; sounding, missing; wind, 330°, force 2; weather, cloudy; sea, very rough; wire angle, 11°.

0	18.4	33.40E	5.25	0	18.4	33.40	5.25	23.98	393.9	0.000
10	18.37	33.42	5.06	10	18.37	33.42	5.06	23.99	393.2	0.039
25	18.37	33.42	5.28	20	18.37	33.42	5.19	23.99	393.4	0.079
48	18.21	33.39	5.60	30	18.37	33.42	5.36	23.99	393.7	0.118
72	13.58	33.46	5.64	50	17.34	33.39	5.61	24.22	372.7	0.195
96	12.61	33.66	5.06	75	13.46	33.49	5.60	25.15	284.5	0.277
144	9.56	33.64	4.38	100	12.40	33.67	4.97	25.50	252.0	0.344
191	8.52	33.98	3.38	150	9.30	33.65	4.24	26.03	201.4	0.457
284	7.57	34.09	3.10	200	8.42	33.99	3.32	26.44	163.5	0.549
378	6.64	34.20	2.35	250	7.87	34.05	3.17	26.57	152.0	0.627
567	5.63	34.35	0.38	300	7.43	34.11	3.00	26.68	142.0	0.701
857	4.33	34.51	0.55	400	6.43	34.22	2.15	26.90	121.6	0.832
1134	3.58	34.54	0.90	500	5.93	34.30	0.85	27.03	110.5	0.948
				600	5.44	34.37	0.39	27.15	100.6	1.055
				700	4.94	34.43	0.45	27.25	90.7	1.149
				800	4.55	34.47	0.53	27.33	84.0	1.237
				1000	3.92	34.52	0.70	27.43	74.7	1.396

a) Middle thermometer reading of 9.97° rejected.

E See footnote page 272.

SIO

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4910

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

CREST; October 12, 1949; 0053 GCT; 30°00'N, 119°27'W; sounding, missing; wind, 340°, force 3; weather, overcast; sea, very rough; wire angle, 11°. 1005

0	19.5	33.91E	4.17r	0	19.5	33.91	(5.48)	24.08	384.4	0.000
10	19.49	33.91	5.48	10	19.49	33.91	5.48	24.08	384.4	0.038
25	19.52	33.95	4.60	20	19.51	33.94	4.63	24.10	383.0	0.077
49	17.48	33.58	5.17	30	19.52	33.95	4.65	24.11	383.0	0.115
73	13.74	33.49	5.35	50	17.00	33.57	5.18	24.44	352.1	0.189
98	12.97	33.60	5.32	75	13.64	33.49	5.35	25.12	287.9	0.269
146	10.16	33.57	4.04	100	12.86	33.60	5.28	25.36	265.4	0.338
194	9.36	34.04	2.63	150	10.07	33.59	3.90	25.86	218.1	0.458
290	8.50	34.29	1.38	200	9.29	34.07	2.52	26.36	171.0	0.556
386	7.28	34.33	1.12	250	8.82	34.23	1.71	26.56	152.9	0.637
578	5.84	34.40	0.47	300	8.37	34.30	1.36	26.69	141.8	0.711
866	4.32	34.52	0.71	400	7.17	34.34	1.07	26.90	122.8	0.842
1154	3.54	34.56	1.04	500	6.40	34.36	0.65	27.02	112.3	0.960
				600	5.70	34.41	0.47	27.15	100.8	1.066
				700	5.08	34.46	0.55	27.26	90.3	1.162
				800	4.60	34.50	0.65	27.35	82.4	1.249
				1000	3.90	34.55	0.86	27.46	72.3	1.404

CREST; October 12, 1949; 0627 GCT; 29°35'N, 120°08'W; sounding, missing; wind, 320°, force 3; weather, cloudy; sea, very rough; wire angle, 10°. 1006

0	19.0	33.68E	5.06	0	19.0	33.68	5.06	24.02	390.2	0.000
10	19.02	33.69	5.15	10	19.02	33.69	5.15	24.03	389.2	0.039
25	19.03	33.68	5.40	20	19.03	33.68	5.32	24.03	390.2	0.078
49	-	33.51	5.98	30	19.04	33.65	5.60	24.00	393.2	0.117
73	11.91	33.48	4.68	50	18.20	33.51	5.97	24.10	383.8	0.195
97	10.69	33.57	3.74	75	11.72	33.48	4.49	25.48	252.8	0.274
146	9.37	33.95	2.76	100	10.56	33.59	3.63	25.78	225.2	0.334
194	8.70	34.09	2.78	150	9.32	33.98	2.77	26.29	177.1	0.435
290	7.31	34.11	2.04	200	8.64	34.10	2.78	26.49	158.8	0.519
386	6.47	34.20	1.01	250	7.83	34.10	2.47	26.62	146.9	0.595
579	5.32	34.33	1.18	300	7.20	34.12	1.94	26.72	137.8	0.666
869	4.31	34.54	1.03	400	6.37	34.21	1.02	26.90	121.6	0.796
1163	3.54	34.56	1.26	500	5.73	34.26	1.12	27.02	111.0	0.912
				600	5.24	34.35	1.18	27.15	99.4	1.018
				700	4.87	34.45	1.12	27.28	88.3	1.111
				800	4.52	34.52	1.06	27.37	79.8	1.195
				1000	3.94	34.55	1.10	27.46	72.7	1.347

CREST; October 12, 1949; 1136 GCT; 29°17'N, 120°47'W; sounding, missing; wind, 320°, force 2; weather, overcast; sea, very rough; wire angle, 8°. 1007

0	18.7	33.49E	4.93	0	18.7	33.49	4.93	23.98	394.4	0.000
10	18.66	33.57	5.40	10	18.66	33.57	5.40	24.04	389.0	0.039
24	18.66	33.49	4.72r	20	18.66	33.52	5.50	24.00	393.0	0.078
48	16.65	33.42	5.58	30	18.66	33.46	5.55	23.95	397.7	0.118
72	14.07	33.49	5.40	50	16.50	33.42	5.58	24.44	351.8	0.193
96	13.20	33.48	4.34	75	13.99	33.49	5.35	25.04	294.7	0.274
143	10.08	33.51	4.29	100	13.08	33.48	4.31	25.22	278.5	0.345
191	8.70	33.95	3.36	150	9.83	33.53	4.24	25.85	218.8	0.469
287	7.43	34.14	2.56	200	8.55	34.01	3.24	26.43	164.1	0.566
384	6.51	34.13	1.53	250	7.86	34.14	2.82	26.64	145.1	0.642
579	5.32	34.29	1.09	300	7.30	34.14	2.45	26.72	138.0	0.714
871	4.28	34.47	1.60	400	6.40	34.13	1.45	26.84	128.0	0.846
1163	3.50	34.52	1.60	500	5.72	34.22	1.17	26.99	113.9	0.967
				600	5.23	34.31	1.10	27.12	102.2	1.075
				700	4.83	34.39	1.30	27.23	92.3	1.172
				800	4.50	34.44	1.55	27.31	85.4	1.261
				1000	3.90	34.50	1.60	27.42	76.0	1.423

E See footnote page 272.

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

1008 CREST; October 12, 1949; 1629 GCT; 28°54'N, 121°19'W; sounding, missing; wind, 320°, force 2; weather, partly cloudy; sea, very rough; wire angle, 5°.

0	19.2	33.68E	5.04	0	19.2	33.68	5.04	23.97	395.1	0.000
10	19.24	33.68	5.06	10	19.24	33.68	5.06	23.97	395.1	0.040
25	19.23	33.62	4.95	20	19.24	33.64	4.98	23.94	398.4	0.079
50	-	33.62	5.12	30	19.24	33.62	4.95	23.93	400.2	0.119
75	14.92	33.62	5.74	50	19.24	33.62	5.12	23.93	400.8	0.199
100	14.36	33.68	6.02	75	14.92	33.62	5.74	24.95	304.0	0.287
149	10.68	33.44	4.65	100	14.36	33.68	6.02	25.11	288.9	0.362
198	9.10	33.80	3.57	150	10.60	33.44	4.62	25.65	237.9	0.493
296	7.71	34.05	2.22	200	9.04	33.81	3.55	26.20	186.4	0.600
394	6.48	34.13	1.33	250	8.25	34.00	2.80	26.47	161.1	0.686
590	5.53	34.38	0.41	300	7.65	34.05	2.20	26.60	149.6	0.763
882	4.41	34.48	0.70	400	6.44	34.14	1.32	26.84	127.8	0.902
1176	3.55	34.49	0.90	500	5.93	34.28	0.65	27.02	113.0	1.023
				600	5.49	34.39	0.42	27.16	99.6	1.129
				700	5.08	34.45	0.50	27.25	90.9	1.224
				800	4.71	34.47	0.63	27.31	86.1	1.313
				1000	4.02	34.49	0.77	27.40	78.0	1.476

1009 CREST; October 12, 1949; 2010 GCT; 28°46'N, 121°54'W; sounding, missing; wind, 320°, force 2; weather, cloudy; sea, very rough; wire angle, 7°.

0	19.8	33.84E	4.05	0	19.8	33.84	4.05	23.94	398.1	0.000
10	19.64	33.80	3.14r	10	19.64	33.80	4.25	23.96	396.0	0.040
24	19.62	33.80	4.68	20	19.63	33.80	4.55	23.96	396.4	0.079
48	-	34.16	5.61	30	19.64	33.82	5.07	23.98	395.6	0.119
72	15.94	33.71	5.28	50	19.65	34.16	5.62	24.23	371.6	0.196
96	15.07	33.71	5.69	75	15.80	33.71	5.30	24.82	316.1	0.282
143	12.15	33.62	4.80	100	14.91	33.71	5.67	25.02	298.0	0.358
192	9.86	33.62	3.63	150	11.76	33.61	4.50	25.58	245.5	0.494
288	8.00	34.05	2.51	200	9.57	33.64	3.52	25.98	207.2	0.607
385	6.69	34.05	1.45	250	8.60	34.03	2.95	26.44	164.3	0.700
579	5.42	34.23	0.56	300	7.80	34.05	2.38	26.68	151.8	0.779
870	4.30	34.49	0.49	400	6.57	34.05	1.30	26.75	136.2	0.923
1160	3.56	34.51	-	500	5.86	34.12	0.70	26.90	123.9	1.053
				600	5.32	34.26	0.55	27.07	107.0	1.169
				700	4.87	34.37	0.52	27.21	94.3	1.270
				800	4.52	34.46	0.49	27.33	84.2	1.359
				1000	3.93	34.51	-	27.43	75.7	1.518

1010 CREST; October 13, 1949; 0120 GCT; 28°22'N, 122°26'W; sounding, missing; wind, 320°, force 2; weather, overcast; sea, very rough; wire angle, 2°.

0	19.7	34.20E	4.76	0	19.7	34.20	4.76	24.25	368.4	0.000
10	19.63	34.11	5.58	10	19.63	34.11	5.58	24.20	373.8	0.037
25	19.80	34.20	5.73	20	19.72	34.18	5.70	24.23	371.0	0.074
50	19.88	34.13	5.53	30	19.83	34.20	5.70	24.22	372.6	0.112
75	16.59	33.87	6.32	50	19.88	34.13	5.53	24.14	380.3	0.187
100	15.74	33.86	4.63	75	16.59	33.87	6.32	24.76	321.8	0.275
150	12.07	33.68	4.63	100	15.74	33.86	4.63	24.96	303.5	0.353
200	10.08	33.69	3.54	150	12.07	33.68	4.63	25.57	246.2	0.490
297	8.61	34.18	1.98	200	10.08	33.69	3.54	25.94	211.8	0.604
394	7.88	34.23	0.79	250	9.16	34.06	2.60	26.38	170.4	0.700
587	6.08	34.42	1.30r	300	8.59	34.18	1.93	26.56	153.9	0.781
880	4.47	34.47	0.65	400	7.83	34.24	0.75	26.72	139.9	0.928
1176	3.60	34.49	0.93	500	6.85	34.36	0.65	26.96	118.5	1.058
				600	6.00	34.43	0.65	27.12	103.2	1.168
				700	5.31	34.45	0.65	27.22	94.0	1.267
				800	4.80	34.46	0.65	27.29	87.9	1.358
				1000	4.07	34.48	0.70	27.39	79.4	1.525

E See footnote page 272.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

CREST; October 13, 1949; 0534 GCT; 27°59'N, 122°56'W; sounding, missing; wind, 020°, force 2; weather, overcast; sea, rough; wire angle, 5°. 1011

0	19.7	34.02E	4.28	0	19.7	34.02	4.28	24.10	382.7	0.000
10	19.72	34.13	4.69	10	19.72	34.13	4.69	24.19	374.3	0.038
25	19.70	34.02	5.04	20	19.70	34.05	4.96	24.14	380.0	0.076
50	-	33.95	4.79	30	19.70	34.00	5.03	24.10	383.9	0.114
75	15.71	33.75	5.47	50	19.70	33.95	4.79	24.06	388.3	0.191
100	14.98	33.71	6.08	75	15.71	33.75	5.47	24.88	310.9	0.278
149	13.74	33.75	4.80	100	14.98	33.71	6.08	25.01	299.1	0.355
198	10.45	33.95	2.83	150	13.74	33.75	4.65	25.30	272.7	0.497
297	9.12	34.29	1.60	200	10.42	33.96	2.76	26.09	197.6	0.615
384	7.88	34.33	1.66	250	9.71	34.16	1.95	26.37	172.2	0.708
590	6.15	34.42	0.63	300	9.10	34.29	1.60	26.57	153.6	0.789
883	4.48	34.47	-	400	7.72	34.34	1.63	26.82	130.8	0.931
1147	3.62	34.54	1.61	500	6.84	34.39	1.06	26.98	116.1	1.055
				600	6.06	34.42	0.65	27.11	104,7	1.165
				700	5.37	34.43	0.68	27.20	96.2	1.266
				800	4.83	34.45	0.81	27.28	89.0	1.358
				1000	4.05	34.50	1.25	27.41	77.7	1.525

CREST; October 10, 1949; 1940 GCT; 30°23'N, 116°47'W; sounding, 1,250 fm; wind, 340°, force 4; weather, partly cloudy; sea, very rough; wire angle, 12°. 1061

0	19.3	33.80E	4.96	0	19.3	33.80	4.96	24.05	387.7	0.000
10	19.25	33.80	4.90	10	19.25	33.80	4.90	24.06	386.7	0.039
25	19.18	33.75	5.04	20	19.20	33.77	4.98	24.25	388.0	0.078
49	-	33.58	5.40	30	19.18	33.74	5.17	24.03	390.1	0.116
73	11.01	33.57	3.81	50	14.20	33.58	5.41	25.07	291.8	0.185
97	9.78	33.84	3.08	75	10.78	33.60	3.69	25.74	227.7	0.249
145	9.44	33.77	2.48	100	9.75	33.84	3.00	26.11	193.6	0.302
194	8.72	34.13	2.39	150	9.38	33.77	2.49	26.12	193.7	0.399
288	7.85	34.23	1.11	200	8.65	34.14	2.35	26.52	156.0	0.486
382	6.88	34.29	0.81	250	8.22	34.20	1.75	26.63	146.1	0.562
571	5.70	34.40	0.49	300	7.72	34.24	1.05	26.74	136.5	0.633
854	4.39	34.49	0.70	400	6.75	34.30	0.75	26.92	120.0	0.761
1268	3.32	34.58	0.96	500	6.10	34.36	0.52	27.06	108.3	0.875
				600	5.55	34.41	0.49	27.16	98.9	0.978
				700	5.05	34.45	0.57	27.26	90.6	1.073
				800	4.83	34.48	0.65	27.30	86.8	1.162
				1000	3.95	34.52	0.79	27.43	75.0	1.324

CREST; October 10, 1949; 1112 GCT; 29°35'N, 116°11'W; sounding, 975 fm; wind, 340°, force 5; weather, clear; sea, high; wire angle, 9°. 1101

0	18.6	-	5.21	0	18.6	(33.65)	5.21	(24.10)	(382.7)	0.000
10	18.63	33.64E	5.15	10	18.63	33.64	5.15	24.10	383.2	(0.038)
24	18.54	33.60	5.35	20	18.56	33.61	5.24	24.09	384.1	0.077
48	13.72	33.44	5.46	30	18.20	33.58	5.40	24.16	378.1	0.115
73	10.92	33.51	3.96	50	13.50	33.44	5.45	25.10	288.1	0.181
97	10.07	33.73	3.09	75	10.82	33.52	3.70	25.68	234.2	0.247
145	8.98	34.02	3.04	100	10.00	33.76	3.09	26.00	203.4	0.301
193	8.51	34.04	2.72	150	8.90	34.03	3.02	26.39	166.9	0.394
290	8.02	-	1.31	200	8.48	34.05	2.65	26.48	160.0	0.475
387	7.06	34.38	0.66	250	8.28	34.20	1.92	26.63	146.8	0.553
582	5.68	34.42	0.29	300	7.95	34.30	1.23	26.75	135.6	0.623
875	4.45	34.52	0.71	400	6.95	34.38	0.61	26.96	116.8	0.749
1290	3.26	-	1.14	500	6.20	34.40	0.37	27.07	106.8	0.861
				600	5.60	34.42	0.30	27.17	98.6	0.963
				700	5.15	34.45	0.40	27.24	91.9	1.059
				800	4.75	34.49	0.60	27.32	85.1	1.147
				1000	4.04	(34.53)	0.85	(27.43)	(75.4)	(1.308)

E See footnote page 272.

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
1102	CREST; October 10, 1949; 0337, 0517 GCT; 29°08'N, 116°43'W; sounding, missing; wind, 340°, force 5; weather, clear; sea, high; wire angle, 37°, 45°.											
0	18.8	33.62E	5.46		0	18.8	33.62	5.46		24.03	389.1	0.000
7	18.80	33.55	5.44		10	18.80	33.55	5.45		23.98	393.8	0.039
19	18.78	33.62	5.47		20	18.78	33.62	5.48		24.04	388.8	0.078
38	18.63	33.57	5.53		30	18.75	33.60	5.50		24.04	389.8	0.117
57	15.66	33.55	5.76		50	16.50	33.56	5.69		24.55	341.6	0.190
74	14.39	33.62	5.69		75	14.30	33.62	5.65		25.08	291.4	0.270
108	12.26	33.58	5.02		100	12.94	33.59	5.23		25.33	267.7	0.339
139	10.21	33.62	3.86		150	9.93	33.68	3.50		25.96	209.1	0.458
200	9.31	34.07	2.48		200	9.31	34.07	2.48		26.36	171.2	0.554
269	7.84	34.05	2.14		250	8.14	34.05	2.23		26.53	156.0	0.635
410	7.16	34.36	0.77		300	7.65	34.13	1.90		26.66	143.7	0.711
631	5.74	34.36	0.51		400	7.23	34.36	0.83		26.90	122.3	0.843
977	4.17	34.47	1.02		500	6.58	34.35	0.59		26.99	115.4	0.962
					600	5.92	34.36	0.51		27.08	107.4	1.073
758	5.01	34.43r	0.85r		700	5.35	34.38	0.55		27.16	99.4	1.177
926	4.30	34.47	0.85		800	4.85	34.41	0.67		27.25	92.2	1.272
1181	3.54	34.52	0.95r		1000	4.10	34.48	1.08		27.38	79.7	1.445
1613	2.66	34.61	1.64		1200	3.49	34.53	1.26		27.48	70.2	1.595
2058	2.04	34.66	2.30		1500	2.87	34.59	1.54		27.59	60.6	1.791
2991	1.70	34.69	2.77		2000	2.09	34.66	2.20		27.71	48.8	2.064
					2500	1.80	34.68	2.60		27.75	45.6	2.301
					3000	(1.65)	(34.69)	(2.76)		(27.77)	(44.5)	(2.526)
1103	CREST; October 9, 1949; 2230 GCT; 28°46'N, 117°20'W; sounding, missing; wind, 340°, force 4; weather, clear; sea, high; wire angle, 22°.											
0	20.4	33.98E	4.52		0	20.4	33.98	4.52		23.89	403.0	0.000
8	20.45	34.02	5.15		10	20.45	34.02	5.30		23.92	400.6	0.040
22	20.42	33.95	5.63		20	20.44	33.98	5.60		23.89	403.4	0.080
45	18.22	33.77	5.47		30	20.43	33.90	5.61		23.83	409.3	0.121
68	15.70	33.66	5.58		50	17.20	33.72	5.45		24.51	345.5	0.197
91	14.66	33.64	5.67		75	15.40	33.65	5.60		24.87	312.0	0.279
137	11.44	33.58	4.63		100	14.16	33.63	5.66		25.11	288.6	0.354
183	9.82	33.98	3.38		150	10.95	33.60	4.28		25.71	232.1	0.484
274	8.33	34.16	2.44		200	9.38	34.04	3.10		26.33	174.5	0.586
366	7.22	34.27	1.17		250	8.63	34.12	2.65		26.51	158.2	0.669
552	6.10	34.20	0.47		300	7.98	34.21	2.15		26.68	142.4	0.744
832	4.57	34.52	0.75		400	6.94	34.27	0.95		26.87	125.0	0.877
1238	3.48	34.61	1.13		500	6.41	34.21	0.55		26.90	123.5	1.002
					600	5.81	34.24	0.50		27.00	114.7	1.121
					700	5.18	34.39	0.55		27.19	96.5	1.226
					800	4.70	34.50	0.70		27.34	83.6	1.316
					1000	4.05	34.56	0.94		27.45	73.7	1.473

E See footnote page 272.

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
CREST; October 9, 1949; 1731 GCT; 28°23'N, 117°54'W; sounding, missing; wind, 340°, force 3; weather, partly cloudy; sea, very rough; wire angle, 17°.												1104
0	20.3	33.91E	4.82		0	20.3	33.91	4.82		23.88	403.8	0.000
10	20.28	33.84	4.74		10	20.28	33.84	4.74		23.82	409.2	0.041
24	20.30	33.86	4.85		20	20.30	33.85	4.80		23.83	409.2	0.082
48	15.42	33.58	5.60		30	20.32	33.85	5.05		23.82	410.1	0.123
71	11.81	33.62	4.41		50	14.85	33.58	5.60		24.93	305.0	0.194
95	10.62	33.75	3.49		75	11.52	33.65	4.20		25.65	236.7	0.262
143	9.72	33.80	3.63		100	10.48	33.76	3.50		25.92	211.2	0.318
189	9.16	34.11	2.35		150	9.63	33.82	3.63		26.11	194.1	0.419
279	8.34	34.31	1.22		200	9.05	34.14	2.14		26.46	162.1	0.508
369	7.78	34.38	0.82		250	8.56	34.27	1.53		26.64	146.0	0.585
551	6.18	34.38	0.48		300	8.19	34.33	1.06		26.74	136.6	0.656
828	4.66	34.49	0.50		400	7.60	34.38	0.75		26.87	126.0	0.787
1227	3.46	34.49	1.51		500	6.70	34.38	0.55		26.99	115.0	0.908
					600	5.82	34.40	0.48		27.12	103.2	1.017
					700	5.25	34.45	0.48		27.23	93.1	1.115
					800	4.79	34.49	0.50		27.32	85.3	1.204
					1000	4.08	34.49	0.75		27.39	78.7	1.368
CREST; October 9, 1949; 1126, 1156, 1222 GCT; 28°00'N, 118°36'W; sounding, missing; wind, 340°, force 4; weather, partly cloudy; sea, high; wire angle, 25°, 35°, 38°.												1105
0	20.3	34.04E	4.89		0	20.3	34.04	4.89		23.97	395.0	0.000
10	20.28	34.02	4.70		10	20.28	34.02	4.70		23.96	396.2	0.040
21	20.26	34.04	4.54		20	20.26	34.04	4.55		23.98	394.6	0.079
43	-	33.86	5.22		30	20.25	34.01	4.75		23.96	396.9	0.119
64	15.84	33.77	5.29		50	18.15	33.83	5.28		24.36	359.6	0.194
86	14.42	33.62	5.17		75	15.25	33.68	5.26		24.92	306.8	0.278
129	11.68	33.58	4.78		100	13.35	33.59	5.10		25.25	275.5	0.350
173	10.82	33.95	3.47		150	11.10	33.63	4.23		25.71	232.3	0.477
259	9.93	34.25	1.62		200	10.57	34.09	2.70		26.16	190.6	0.583
346	8.72	34.38	1.42		250	10.05	34.23	1.70		26.36	172.6	0.674
					300	9.36	34.33	1.54		26.56	154.7	0.755
498	6.94	34.40	0.53		400	8.03	34.40	1.02		26.82	130.9	0.898
					500	6.93	34.40	0.54		26.98	116.7	1.022
812	4.91	34.45	0.65		600	6.10	34.41	0.55		27.09	106.0	1.134
1098	3.94	34.54	0.88		700	5.47	34.42	0.60		27.18	98.1	1.236
					800	4.96	34.45	0.65		27.27	90.6	1.330
					1000	4.23	34.52	0.80		27.40	78.3	1.499
CREST; October 9, 1949; 0527 GCT; 27°38'N, 119°15'W; sounding, missing; wind, 340°, force 5; weather, partly cloudy; sea, high; wire angle, 17°.												1106
0	20.5	33.95E	5.17		0	20.5	33.95	5.17		23.85	406.7	0.000
9	20.50	33.96	5.14		10	20.50	33.96	5.15		23.86	406.0	0.041
23	20.50	33.95	-		20	20.50	33.96	5.20		23.86	406.3	0.081
47	16.71	33.75	5.94		30	20.50	33.93	5.65		23.84	408.8	0.122
71	15.36	33.69	5.78		50	16.63	33.75	5.95		24.66	330.6	0.196
94	14.25	33.68	5.36		75	15.17	33.69	5.74		24.95	304.3	0.275
142	11.69	33.60	4.23		100	13.85	33.68	5.25		25.22	278.8	0.348
189	9.92	34.04	2.95		150	11.40	33.60	4.05		25.63	239.9	0.478
281	9.19	34.47	1.62		200	9.74	34.17	2.66		26.37	170.7	0.581
373	8.34	34.52	0.62		250	9.38	34.43	1.97		26.63	146.6	0.660
561	6.40	34.54	0.84		300	9.06	34.49	1.40		26.73	138.3	0.731
846	4.79	34.56	0.96		400	8.05	34.52	0.64		26.91	122.3	0.861
1255	3.42	34.63	1.11		500	7.00	34.53	0.76		27.07	108.2	0.976
					600	6.13	34.54	0.87		27.19	96.9	1.079
					700	5.49	34.55	0.92		27.28	88.7	1.171
					800	4.99	34.56	0.95		27.35	82.7	1.257
					1000	4.21	34.57	1.02		27.44	74.3	1.415

E See footnote page 272.

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

1107 CREST; October 8, 1949; 2304 GCT; 27°13'N, 119°53'W; sounding, missing; wind, 340°, force 5; weather, partly cloudy; sea, high; wire angle, 30°.

0	20.7	33.91E	5.70	0	20.7	33.91	5.70	23.75	415.8	0.000
8	20.75	33.90	4.78	10	20.75	33.90	4.77	23.75	416.9	0.042
22	20.75	33.91	4.82	20	20.75	33.91	4.80	23.75	416.5	0.083
43	18.81	33.75	5.39	30	20.70	33.89	5.00	23.75	416.9	0.125
65	15.58	33.62	5.95	50	17.40	33.68	5.70	24.43	352.9	0.202
86	14.38	33.63	5.40	75	15.00	33.63	5.82	24.94	304.9	0.284
127	11.84	33.58	4.86	100	13.57	33.62	5.24	25.23	277.6	0.357
168	9.94	33.79	3.80	150	10.66	33.60	4.35	25.77	227.2	0.483
250	9.12	34.22	1.86	200	9.52	34.11	2.68	26.36	171.8	0.583
332	7.86	34.25	-	250	9.12	34.22	1.86	26.50	158.8	0.666
498	6.37	34.37	0.45	300	8.44	34.24	1.40	26.63	147.2	0.742
755	4.97	34.46	0.66	400	7.15	34.30	0.66	26.87	125.5	0.878
1139	3.71	34.54	1.09	500	6.37	34.37	0.45	27.03	111.2	0.997
				600	5.70	34.41	0.50	27.15	100.6	1.102
				700	5.20	34.44	0.60	27.23	93.1	1.199
				800	4.78	34.47	0.70	27.30	86.8	1.289
				1000	4.09	34.51	0.90	27.41	77.3	1.453

1108 CREST; October 8, 1949; 1659 GCT; 26°54'N, 120°29'W; sounding, missing; wind, 360°, force 5; weather, partly cloudy; sea, very rough; wire angle, 22°.

0	20.2	33.96E	5.12	0	20.2	33.96	5.12	23.93	399.0	0.000
10	20.23	33.98	5.05	10	20.23	33.98	5.05	23.95	397.8	0.040
24	20.20	33.99	5.03	20	20.21	33.99	5.05	23.96	396.9	0.080
48	17.28	33.77	5.64	30	20.20	33.98	5.09	23.95	397.8	0.119
71	15.59	33.71	5.76	50	17.20	33.76	5.68	24.54	342.6	0.193
94	14.64	33.69	5.29	75	15.45	33.70	5.76	24.89	309.3	0.275
142	12.14	33.62	4.58	100	14.35	33.69	5.14	25.12	287.9	0.350
188	9.96	33.91	3.01	150	11.75	33.63	4.50	25.59	244.1	0.482
287	9.09	34.31	1.46	200	9.75	34.00	2.68	26.23	183.5	0.590
366	8.31	34.38	0.76	250	9.30	34.23	1.89	26.49	160.2	0.675
549	6.50	34.43	0.45	300	9.00	34.32	1.30	26.61	149.8	0.752
828	4.88	34.49	0.49	400	7.96	34.40	0.65	26.83	129.8	0.892
1236	3.49	34.58	1.08	500	6.95	34.42	0.46	26.99	115.5	1.015
				600	6.12	34.44	0.45	27.12	104.1	1.125
				700	5.49	34.46	0.45	27.21	95.3	1.225
				800	5.00	34.48	0.45	27.29	89.0	1.317
				1000	4.23	34.53	0.59	27.41	77.6	1.483

1109 CREST; October 8, 1949; 1143 GCT; 26°36'N, 121°07'W; sounding, missing; wind, 350°, force 4; weather, cloudy; sea, very rough; wire angle, 25°.

0	20.6	33.96E	5.23	0	20.6	33.96	5.23	23.83	408.4	0.000
10	20.59	33.96	4.82	10	20.59	33.96	4.82	23.83	408.4	0.041
23	20.57	33.96	4.86	20	20.58	33.96	4.85	23.83	408.6	0.082
45	-	33.93	5.07	30	20.57	33.96	4.90	23.84	408.6	0.123
67	16.63	33.79	5.30	50	18.10	33.92	5.15	24.44	351.7	0.199
88	15.45	33.75	5.25	75	16.20	33.78	5.30	24.79	319.6	0.283
131	13.17	33.60	6.22r	100	14.76	33.72	5.18	25.06	294.2	0.359
173	10.58	33.64	3.58	150	12.00	33.61	4.30	25.53	249.9	0.495
256	8.82	34.16	2.09	200	9.68	33.79	2.98	26.08	297.7	0.607
340	8.26	34.31	1.26	250	8.89	34.12	2.17	26.47	161.9	0.697
517	6.36	34.33	0.76	300	8.49	34.26	1.56	26.64	146.4	0.774
789	4.93	34.47	0.25	400	7.76	34.32	1.00	26.80	132.6	0.913
1179	3.62	34.54	0.89	500	6.52	34.33	0.80	26.98	116.2	1.038
				600	5.85	34.37	0.58	27.10	105.7	1.149
				700	5.32	34.43	0.35	27.21	95.6	1.249
				800	4.89	34.47	0.25	27.29	88.1	1.341
				1000	4.15	34.51	0.48	27.40	78.1	1.507

E See footnote page 272.

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

CREST; October 8, 1949; 0503, 0624 GCT; 26°17'N, 121°40'W; sounding, missing; wind, 360°, force 3; weather, partly cloudy; sea, rough; wire angle, 6°, 9°. 1110

0	20.8	-	5.31	0	20.8	(34.11)	5.31	(23.89)	(402.5)	0.000
10	20.80	34.11E	5.01	10	20.80	34.11	5.01	23.89	402.9	(0.040)
25	20.81	34.14	5.11	20	20.81	34.13	5.08	23.90	402.0	0.081
50	18.98	34.05	5.72	30	20.81	34.14	5.40	23.91	401.7	0.121
75	16.71	34.00	5.73	50	18.98	34.05	5.72	24.32	363.2	0.197
99	15.94	33.91	5.52	75	16.71	34.00	5.73	24.84	314.9	0.282
149	12.71	33.68	4.85	100	15.93	33.91	5.50	24.95	304.5	0.359
199	10.04	33.80	3.73	150	12.58	33.68	4.80	25.47	255.2	0.499
298	8.48	-	2.20	200	10.02	33.80	3.67	26.03	202.6	0.613
374	7.72	34.27	1.29	250	9.08	34.02	2.83	26.36	172.4	0.708
587	5.90	34.40	0.59	300	8.44	34.17	2.18	26.58	152.3	0.789
881	4.49	34.51	0.68	400	7.45	34.29	1.13	26.82	130.5	0.930
1166	3.60	-	0.85	500	6.56	34.35	0.75	26.99	115.1	1.053
				600	5.81	34.41	0.60	27.13	102.2	1.162
766	4.90	34.45	0.62	700	5.25	34.45	0.60	27.23	93.0	1.259
960	4.22	34.51	0.65	800	4.80	34.49	0.65	27.32	85.6	1.348
1448	2.97	34.60	1.14	1000	4.08	34.53	0.75	27.43	75.7	1.509
1936	2.18	34.67	2.03	1200	3.52	34.56	0.88	27.51	68.5	1.654
2430	1.82	34.69	2.36	1500	2.87	34.61	1.20	27.60	59.3	1.846
2927	1.66	34.70	2.79	2000	2.12	34.68	2.10	27.72	47.8	2.112
				2500	1.79	34.69	2.44	27.76	44.6	2.344
				3000	(1.64)	(34.70)	-	(27.78)	(43.9)	(2.566)

CREST; October 5, 1949; 1528 GCT; 27°26'N, 115°23'W; sounding, missing; wind, 310°, force 4; weather, cloudy; sea, rough; wire angle, 24°. 1201

0	18.7	33.69E	5.63	0	18.7	33.69	5.63	24.12	381.1	0.000
10	18.60	33.71	5.23	10	18.60	33.71	5.23	24.16	377.4	0.038
23	17.94	33.66	2.64r	20	18.08	33.66	5.11	24.25	369.5	0.075
46	13.93	33.55	4.85	30	16.79	33.61	5.02	24.52	343.8	0.111
68	12.04	33.57	4.60	50	13.35	33.55	4.80	25.22	277.3	0.173
91	10.48	33.66	3.62	75	11.27	33.60	4.45	25.66	236.0	0.237
180	9.74	34.29	2.46	100	10.25	33.72	3.31	25.93	210.5	0.293
270	9.62	34.47	0.61	150	9.72	34.09	2.75	26.31	175.5	0.390
361	8.41	34.47	0.66	200	9.86	34.37	2.21	26.50	158.0	0.473
542	6.40	34.45	0.66	250	9.80	34.46	0.75	26.58	151.5	0.551
821	4.63	34.47	0.63	300	9.27	34.47	0.61	26.68	143.0	0.624
1109	3.72	34.52	0.89	400	7.93	34.46	0.66	26.88	125.0	0.758
				500	6.80	34.45	0.66	27.04	111.0	0.876
				600	5.90	34.45	0.65	27.15	100.3	0.981
				700	5.21	34.46	0.64	27.25	91.8	1.077
				800	4.72	34.47	0.62	27.31	86.1	1.166
				1000	4.01	34.50	0.76	27.41	77.2	1.329

E See footnote page 272.

SIO

CCOFI

4910

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

1202 CREST; October 5, 1949; 2013 GCT; 27°08'N, 115°54'W; sounding, missing; wind, 340°, force 4; weather, cloudy; sea, rough; wire angle, 18°.

0	21.2	33.82E	5.10	0	21.2	33.82	5.10	23.58	432.8	0.000
10	21.16	33.75	4.64	10	21.16	33.75	4.64	23.52	438.3	0.044
24	21.13	33.84	4.76	20	21.13	33.82	4.69	23.58	433.0	0.087
48	15.12	33.51	5.45	30	20.85	33.81	5.20	23.65	426.5	0.130
72	12.40	33.48	4.76	50	15.00	33.50	5.45	24.84	313.9	0.204
96	10.75	33.64	3.86	75	12.25	33.48	4.70	25.38	262.4	0.276
143	-	33.86	2.41	100	10.57	33.67	3.72	25.84	219.5	0.336
189	9.30	34.29	1.73	150	9.54	33.92	2.24	26.21	185.1	0.438
284	8.87	34.45	0.66	200	9.31	34.34	1.61	26.57	151.4	0.522
379	7.88	34.45	0.58	250	9.16	34.44	1.02	26.67	142.6	0.595
568	6.34	34.56	0.44	300	8.74	34.45	0.59	26.75	136.4	0.665
852	4.49	34.54	0.61	400	7.71	34.45	0.56	26.91	122.5	0.794
1136	3.63	34.51	0.97	500	6.89	34.53	0.47	27.08	106.5	0.909
				600	6.08	34.56	0.45	27.22	94.5	1.009
				700	5.35	34.56	0.48	27.31	86.4	1.100
				800	4.75	34.55	0.56	27.37	80.5	1.183
				1000	3.97	34.52	0.79	27.43	75.4	1.338

1203 CREST; October 6, 1949; 0119 GCT; 26°40'N, 116°28'W; sounding, missing; wind, 320°, force 3; weather, cloudy; sea, rough; wire angle, 20°.

0	20.3	33.77E	4.96	0	20.3	33.77	4.96	23.75	415.7	0.000
9	20.32	33.77	5.02	10	20.32	33.77	5.02	23.76	415.2	0.042
23	20.28	33.77	5.02	20	20.28	33.77	5.01	23.77	414.5	0.083
46	16.32	33.59	5.57	30	20.20	33.74	5.08	23.77	415.1	0.125
69	13.50	33.49	5.48	50	15.80	33.56	5.55	24.71	326.4	0.199
92	11.60	33.56	5.29	75	12.98	33.49	5.47	25.25	275.3	0.274
137	-	33.68	4.67	100	11.22	33.58	5.22	25.65	237.4	0.338
182	9.52	34.18	2.35	150	9.90	33.77	4.13	26.03	201.9	0.448
273	9.02	34.40	1.04	200	9.45	34.26	1.90	26.49	159.6	0.538
365	8.09	34.42	0.66	250	9.23	34.38	1.23	26.62	148.1	0.615
549	6.38	34.47	0.52	300	8.76	34.41	0.88	26.72	139.3	0.687
830	4.80	34.54	0.61	400	7.71	34.43	0.61	26.89	123.9	0.819
1118	3.78	34.58	0.73	500	6.79	34.46	0.54	27.04	110.2	0.936
				600	6.00	34.49	0.52	27.17	99.8	1.041
				700	5.40	34.51	0.55	27.26	90.7	1.136
				800	4.92	34.53	0.60	27.33	84.2	1.223
				1000	4.16	34.57	0.68	27.45	73.9	1.381

1204 CREST; October 6, 1949; 0628 GCT; 26°15'N, 117°03'W; sounding, missing; wind, 320°, force 3; weather, cloudy; sea, rough; wire angle, 22°.

0	21.8	34.20E	4.82	0	21.8	34.20	4.82	23.70	420.9	0.000
10	21.75	34.20	3.83r	10	21.75	34.20	4.80	23.70	421.2	0.042
23	21.74	34.21	3.49r	20	21.74	34.21	4.78	23.71	420.7	0.084
46	17.46	33.77	4.71	30	21.73	34.19	4.76	23.70	422.1	0.126
69	15.95	33.81	4.04r	50	17.12	33.77	4.68	24.56	340.1	0.203
92	14.66	33.71	4.45	75	15.58	33.81	4.56	24.95	304.2	0.283
137	-	34.14r	4.11	100	14.31	33.71	4.40	25.14	285.9	0.357
180	10.26	34.00	1.94	150	11.76	33.83	3.81	25.75	229.3	0.485
267	9.34	34.35	1.33	200	9.93	34.12	1.78	26.30	177.5	0.588
353	8.26	34.42	0.76	250	9.55	34.31	1.46	26.51	158.5	0.671
526	6.64	34.45	0.43	300	8.88	34.38	1.10	26.67	143.6	0.746
797	5.00	34.51	0.50	400	7.75	34.43	0.65	26.88	124.5	0.881
1081	3.95	34.56	0.83	500	6.86	34.44	0.45	27.02	112.8	0.999
				600	6.09	34.47	0.45	27.15	101.3	1.106
				700	5.47	34.49	0.46	27.24	91.6	1.203
				800	5.00	34.51	0.50	27.31	86.6	1.292
				1000	4.23	34.55	0.73	27.43	76.3	1.454

E See footnote page 272.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	µg at/L	m	°C	‰	ml/L	µg at/L	g/L	$10^5 cm^3/g$	dyn. m	

CREST; October 6, 1949; 1141 GCT; 25°51'N, 117°37'W; sounding, missing; wind, 320°, force 4; weather, cloudy; sea, rough; wire angle, 15°. 1205

0	22.1	34.14E	4.77	0	22.1	34.14	4.77	23.56	433.6	0.000
9	22.05	34.13	5.14	10	22.04	34.13	5.14	23.57	433.9	0.043
23	22.03	34.14	5.02	20	22.04	34.14	5.05	23.58	433.5	0.087
48	17.94	33.91	5.57	30	22.02	34.13	5.10	23.57	434.0	0.130
71	16.15	33.80	5.57	50	17.75	33.91	5.57	24.52	344.3	0.208
96	14.44	33.66	5.24	75	15.96	33.79	5.55	24.85	313.6	0.290
144	-	33.77	4.56	100	13.95	33.66	5.18	25.18	282.3	0.365
192	10.45	34.15	2.51	150	11.23	33.80	4.43	25.82	222.3	0.490
289	9.32	34.45	0.95	200	10.35	34.21	2.20	26.29	178.0	0.591
315p	9.57r	34.20r	2.02r	250	9.75	34.41	1.25	26.55	154.3	0.674
461p	7.42	34.45	0.53	300	9.18	34.45	0.88	26.68	143.2	0.748
793p	5.01	34.49	0.57	400	8.06	34.45	0.59	26.85	127.8	0.884
1104p	3.92	34.55	0.76	500	7.05	34.45	0.51	27.00	114.5	1.005
				600	6.17	34.46	0.51	27.13	103.2	1.114
				700	5.48	34.47	0.54	27.22	94.5	1.212
				800	5.00	34.49	0.57	27.29	88.1	1.304
				1000	4.23	34.53	0.67	27.41	77.7	1.469

CREST; October 6, 1949; 1709 GCT; 25°26'N, 118°12'W; sounding, missing; wind, 320°, force 4; weather, overcast; sea, rough; wire angle, 12°. 1206

0	21.6	34.25E	4.93	0	21.6	34.25	4.93	23.78	413.2	0.000
10	21.58	34.25	4.69	10	21.58	34.25	4.69	23.78	413.1	0.041
25	21.58	34.23	4.59	20	21.58	34.24	4.60	23.78	414.0	0.083
49	20.90	33.84	4.80	30	21.56	34.20	4.61	23.76	416.7	0.124
73	15.60	33.64	4.70	50	20.55	33.82	4.80	23.74	418.9	0.208
98	14.44	33.67	4.85	75	15.39	33.64	4.71	24.86	312.6	0.299
146	-	33.66	4.39	100	14.35	33.67	4.85	25.11	289.5	0.375
194	9.92	34.07	4.13	150	11.74	33.67	4.37	25.63	240.8	0.507
289	9.18	34.36	3.16	200	9.84	34.11	4.07	26.30	177.0	0.611
383	8.28	34.44	2.40	250	9.41	34.28	3.63	26.51	158.4	0.666
572	6.10	34.42	0.68	300	9.10	34.38	3.06	26.64	146.9	0.771
857	4.72	34.48	0.44	400	8.07	34.44	2.23	26.84	128.7	0.909
1148	3.73	34.54	0.81	500	6.82	34.42	1.15	27.01	113.7	1.031
				600	5.89	34.42	0.62	27.13	102.3	1.139
				700	5.36	34.44	0.49	27.21	95.2	1.237
				800	4.95	34.47	0.44	27.28	88.9	1.329
				1000	4.20	34.52	0.55	27.41	78.1	1.496

CREST; October 6, 1949; 2157 GCT; 25°02'N, 118°46'W; sounding, missing; wind, 340°, force 3; weather, cloudy; sea, very rough; wire angle, 20°. 1207

0	21.7	34.18E	4.85	0	21.7	34.18	4.85	23.70	420.9	0.000
10	21.61	34.20	5.07	10	21.61	34.20	5.07	23.74	417.4	0.042
23	21.55	34.25	5.13	20	21.57	34.24	5.12	23.78	414.0	0.084
46	-	33.96	5.79	30	21.55	34.24	5.30	23.79	413.7	0.125
70	16.22	33.78	5.61	50	19.40	33.91	5.77	24.11	383.6	0.205
94	14.74	33.69	5.44	75	15.93	33.75	5.58	24.82	315.7	0.292
140	11.63[a]	33.62	3.74	100	14.40	33.67	5.35	25.10	290.4	0.368
186	9.74	33.86	3.32	150	11.00	33.62	3.68	25.72	231.5	0.498
277	9.32	34.34	1.27	200	9.65	34.05	3.00	26.29	178.2	0.601
368	8.30	34.43	0.65	250	9.51	34.27	1.74	26.48	160.9	0.685
552	6.39	34.42	0.97	300	9.13	34.38	1.03	26.63	147.5	0.762
832	4.70	34.43	0.91	400	7.94	34.43	0.66	26.86	127.3	0.900
1120	3.70	34.55	0.81	500	6.88	34.42	0.88	27.00	114.5	1.021
				600	6.00	34.42	0.98	27.12	103.8	1.130
				700	5.35	34.42	0.99	27.20	96.7	1.230
				800	4.84	34.43	0.95	27.26	90.6	1.329
				1000	4.08	34.49	0.86	27.40	78.7	1.493

a) Left thermometer reading of 13.88° rejected.

E See footnote page 272.

SIO

CCOFI
4910

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
1208	CREST; October 7, 1949; 0301 GCT; 24°36'N, 119°21'W; sounding, missing; wind, 320°, force 3; weather, overcast; sea, rough; wire angle, 10°.											
0	21.6	34.27E	4.95		0	21.6	34.27	4.95		23.81	410.6	0.000
10	21.56	34.27	4.76		10	21.56	34.27	4.76		23.81	411.0	0.041
25	21.63	34.33	4.82		20	21.61	34.32	4.78		23.83	409.1	0.082
49	18.73	33.98	5.37		30	21.64	34.33	4.91		23.83	409.7	0.123
73	16.94	33.87	4.62		50	18.50	33.98	5.37		24.39	356.9	0.200
98	15.63	33.80	5.47		75	16.85	33.87	4.61		24.70	327.3	0.206
147	11.91	33.61	4.29		100	15.50	33.79	5.47		24.95	304.2	0.339
196	10.52	34.04	2.57		150	11.79	33.61	4.17		25.57	246.0	0.476
290	9.20	34.39	1.13		200	10.46	34.07	2.50		26.17	190.1	0.586
385	7.91	34.42	0.55		250	9.70	34.31	1.60		26.48	160.9	0.673
555	6.46	34.43	0.60		300	9.07	34.40	1.03		26.66	145.0	0.750
867	4.68	34.49	0.66		400	7.79	34.42	0.55		26.87	125.9	0.885
1156	3.74	34.54	1.25		500	6.90	34.42	0.60		27.00	114.8	1.006
					600	6.12	34.44	0.62		27.12	104.1	1.115
					700	5.45	34.46	0.64		27.22	95.1	1.215
					800	4.95	34.48	0.65		27.29	88.2	1.306
					1000	4.20	34.52	0.85		27.41	78.1	1.472
1209	CREST; October 7, 1949; 0813 GCT; 24°11'N, 119°56'W; sounding, missing; wind, 320°, force 3; weather, overcast; sea, very rough; wire angle, 11°.											
0	22.3	34.49E	5.40		0	22.3	34.49	5.40		23.75	415.7	0.000
10	22.25	34.47	4.76		10	22.25	34.47	4.76		23.76	415.2	0.042
24	22.11	34.47	4.76		20	22.15	34.47	4.76		23.79	412.6	0.083
48	21.97	34.47	4.76		30	22.05	34.47	4.77		23.82	410.3	0.124
73	18.32	34.09	5.47		50	21.90	34.47	4.76		23.86	407.2	0.206
97	16.43	33.93	5.15		75	18.00	34.07	5.45		24.58	339.4	0.299
146	12.88	33.75	4.07		100	16.20	33.91	5.10		24.89	310.7	0.381
194	10.53	33.97	3.00		150	12.65	33.75	4.00		25.51	251.6	0.521
290	9.29	34.38	1.16		200	10.45	34.02	2.86		26.13	193.7	0.632
383	8.26	34.42	0.97		250	9.78	34.32	1.71		26.48	161.4	0.721
571	6.31	34.42	0.74		300	9.18	34.39	1.13		26.63	147.5	0.798
856	4.66	34.50	0.68		400	8.05	34.42	0.96		26.83	129.8	0.937
1147	3.82	34.54	0.84		500	7.02	34.42	0.82		26.98	116.4	1.060
					600	6.05	34.42	0.73		27.11	104.6	1.171
					700	5.38	34.46	0.70		27.22	94.1	1.270
					800	4.88	34.49	0.68		27.31	86.6	1.360
					1000	4.21	34.53	0.74		27.41	77.6	1.524
1210	CREST; October 7, 1949; 1249 GCT; 23°46'N, 120°26'W; sounding, missing; wind, 320°, force 3; weather, overcast; sea, rough; wire angle, 10°.											
0	22.1	34.47E	5.29		0	22.1	34.47	5.29		23.80	411.3	0.000
10	22.13	34.49	4.54		10	22.13	34.49	4.54		23.81	410.5	0.041
24	22.13	34.48	4.28		20	22.13	34.48	4.33		23.81	411.4	0.082
49	-	34.25	4.58		30	22.10	34.44	4.30		23.79	413.8	0.123
73	17.62	34.15	5.22		50	21.50	34.25	4.60		23.81	412.2	0.206
98	16.69	34.08	5.06		75	17.50	34.15	5.23		24.76	322.0	0.298
147	13.85	33.86	4.63		100	16.60	34.08	5.05		24.93	307.3	0.377
195	10.34	33.84	3.57		150	13.55	33.86	4.58		25.42	260.8	0.518
291	8.99	34.29	1.41		200	10.21	33.84	3.41		26.03	202.8	0.634
385	8.14	34.40	0.69		250	9.36	34.17	2.08		26.43	165.7	0.727
576	6.36	34.45	0.44		300	8.94	34.31	1.29		26.61	149.7	0.805
864	4.71	34.49	0.45		400	7.98	34.41	0.66		26.84	129.4	0.945
1157	3.78	34.56	0.72		500	7.02	34.44	0.50		27.00	114.9	1.067
					600	6.19	34.45	0.44		27.12	104.1	1.177
					700	5.50	34.46	0.43		27.21	95.7	1.277
					800	4.97	34.48	0.44		27.29	88.4	1.369
					1000	4.23	34.52	0.52		27.40	78.5	1.535

E See footnote page 272.

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

BLACK DOUGLAS; November 21, 1949; 0627 GCT; 46°15'N, 124°50'W; sounding, 405 fm; wind, 170°, force 5; weather, overcast; sea, very rough; wire angle, 24°. 101

0	12.0	32.23E	5.96	0.78	0	12.0	32.23	5.96	0.78	24.47	348.1	0.000
9	11.66	32.23	5.82	0.79	10	11.65	32.23	5.83	0.79	24.53	342.0	0.034
23	11.69	32.23	6.01	0.75	20	11.69	32.23	6.01	0.75	24.52	342.9	0.069
46	8.86	32.77	4.55	1.64	30	11.30	32.25	5.94	0.81	24.61	334.9	0.103
69	7.70	33.46	3.11	2.27	50	8.57	32.90	4.14	1.80	25.56	244.1	0.160
92	7.74	33.74	2.44	2.51	75	7.69	33.59	2.97	2.33	26.23	180.8	0.214
137	7.57	33.90	1.59	2.79	100	7.73	33.78	2.18	2.57	26.38	167.7	0.257
181	7.46	33.98	1.56	2.82	150	7.52	33.93	1.57	2.81	26.53	154.2	0.337
223	7.14	34.00	1.61	2.78	200	7.37	33.99	1.60	2.80	26.60	148.3	0.414
265	6.69	34.04	1.49	2.90	250	6.84	34.03	1.55	2.86	26.70	139.3	0.485
349	6.10	34.08	1.16	2.98	300	6.39	34.06	1.35	2.94	26.78	131.7	0.553
438	5.66	34.09	0.90	3.16	400	5.87	34.09	1.00	3.08	26.87	124.0	0.680
535	5.15	34.15	0.70	3.11	500	5.27	34.13	0.77	3.14	26.98	114.8	0.800

BLACK DOUGLAS; November 20, 1949; 1626 GCT; 44°24'N, 124°55'W; sounding, 315 fm; wind, 170°, force 2; weather, overcast; sea, moderate; wire angle, 10°. 201

0	11.9	32.23E	5.79	0.76	0	11.9	32.23	5.79	0.76	24.49	346.3	0.000
10	11.62	32.21	5.87	0.76	10	11.62	32.21	5.87	0.76	24.52	343.0	0.034
25	11.80	32.34	5.98	0.73	20	11.74	32.27	5.96	0.73	24.54	340.8	0.069
49	9.16	33.30	4.68	1.74	30	11.80	32.46	5.96	0.78	24.68	328.3	0.102
73	8.42	33.81	3.30	2.37	50	9.12	33.33	4.57	1.78	25.82	220.4	0.157
98	8.30	33.89	2.82	2.49	75	8.40	33.82	3.27	2.39	26.31	173.8	0.206
146	7.88	33.95	2.19	2.65	100	8.29	33.89	2.78	2.50	26.38	167.3	0.249
194	7.76	34.00	1.96	2.54	150	7.87	33.96	2.15	2.65	26.50	156.9	0.330
288	7.20	34.04	1.67	2.66	200	7.74	34.01	1.95	2.54	26.55	152.3	0.408
336	6.55	34.05	1.76	-	250	7.48	34.03	1.77	2.58	26.61	147.7	0.482
384	6.24	34.09	1.52	-	300	7.02	34.04	1.70	-	26.68	141.6	0.555
432	-	34.06r	1.36	-	400	6.09	34.09	1.47	-	26.85	126.8	0.688
482	5.52	34.14	0.95	-	500	(5.38)	(34.16)	(0.84)	-	(26.99)	(113.9)	(0.798)

BLACK DOUGLAS; November 20, 1949; 0921 GCT; 44°20'N, 125°50'W; sounding, 1,600 fm; wind, 140°, force 3; weather, overcast; sea, rough; wire angle, 0°. 202

0	12.0	32.21E	6.15	0.63	0	12.0	32.21	6.15	0.63	24.45	349.6	0.000
11	11.99	32.21	5.84	0.60	10	11.99	32.21	5.83	0.60	24.45	349.4	0.035
28	11.98	32.22	5.83	0.62	20	11.99	32.21	5.82	0.60	24.45	349.6	0.070
54	7.51	32.68	5.34	1.42	30	11.97	32.22	5.81	0.64	24.47	348.9	0.105
82	8.02	33.40	3.82	2.00	50	7.60	32.57	5.50	1.31	25.45	255.0	0.165
108	7.87	33.69	3.02	2.27	75	7.96	33.24	3.54	1.86	25.92	210.6	0.223
162	7.58	33.89	2.41	2.48	100	7.92	33.63	3.09	2.22	26.23	181.7	0.272
215	6.77	34.02	1.94	2.74	150	7.65	33.86	2.54	2.43	26.45	161.4	0.358
319	6.22	34.11	1.32	2.87	200	6.97	33.99	2.04	2.68	26.65	143.0	0.434
422	5.62	34.14	0.82	2.95	250	6.57	34.07	1.69	2.80	26.77	132.6	0.503
627	4.62	34.25	0.40	3.20	300	6.34	34.10	1.41	2.86	26.82	128.0	0.568
934	3.73	34.40	0.39	3.30	400	5.72	34.13	0.90	2.92	26.92	119.4	0.692
1261	3.48[a]	34.49	0.55	3.24	500	5.20	34.19	0.56	3.04	27.03	109.5	0.806
					600	4.74	34.24	0.41	3.18	27.12	101.4	0.912
					700	4.31	34.28	0.39	3.24	27.20	94.3	1.010
					800	3.97	34.32	0.39	3.28	27.27	88.3	1.101
					1000	3.64	34.43	0.40	3.30	27.39	78.2	1.268

a) Left thermometer reading of 3.70° rejected.

E Evaporation of all salinity samples occurred on Cruise 4911 on stations 101 through 461. Estimated average corrections to values given here can be made by subtracting 0.052 ‰ from the value of S, 0.040 from σ_t and by adding 3.9 to $10^5\delta$ at all depths; to ΔD add 0.004 for each 100 meter depth increment.

S10

CCOFI
4911

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

203 BLACK DOUGLAS; November 20, 1949; 0155 GCT; 44°17'N, 126°46'W; sounding, 1,600 fm; wind, 120°, force 4; weather, cloudy; sea, rough; wire angle, 23°.

0	13.4	32.31E	5.81	0.47	0	13.4	32.31	5.81	0.47	24.24	368.3	0.000
10	13.37	32.32	5.86	0.45	10	13.37	32.32	5.86	0.45	24.24	366.5	0.037
26	13.25	32.29	5.82	0.48	20	13.30	32.30	5.83	0.45	24.26	366.9	0.073
51	8.88	32.57	5.67	1.20	30	13.22	32.29	5.79	0.52	24.28	366.5	0.110
76	7.68	32.99	5.03	1.62	50	9.10	32.54	5.68	1.16	25.19	278.7	0.175
101	8.01	33.52	3.68	2.12	75	7.70	33.00	5.05	1.60	25.77	224.8	0.238
146	7.76	33.71	3.23	2.20	100	8.00	33.51	3.69	2.12	26.13	191.6	0.290
191	6.63	33.93	3.13	2.25	150	7.70	33.73	3.22	2.20	26.34	171.7	0.380
280	5.85	33.97	2.08	2.70	200	6.48	33.94	3.06	2.27	26.68	140.3	0.458
369	5.42	34.05	1.23	2.92	250	6.05	33.95	2.45	2.53	26.74	134.8	0.527
549	4.79	34.19	0.52	3.09	300	5.74	33.99	1.84	2.77	26.81	128.8	0.593
827	3.97	34.35	0.35	3.20	400	5.30	34.08	1.05	2.96	26.93	117.9	0.716
1143	3.46	34.45	0.48	3.21	500	4.95	34.15	0.62	3.05	27.03	109.5	0.830
					600	4.64	34.23	0.45	3.12	27.13	100.9	0.935
					700	4.31	34.29	0.38	3.16	27.21	93.5	1.032
					800	4.02	34.34	0.35	3.20	27.28	87.3	1.123
					1000	3.63	34.42	0.37	3.21	27.38	78.7	1.289

204 BLACK DOUGLAS; November 19, 1949; 1847 GCT; 44°14'N, 127°42'W; sounding, 1,580 fm; wind, 100°, force 4; weather, overcast; sea, rough; wire angle, 8°.

0	13.2	32.31E	5.72	0.44	0	13.2	32.31	5.72	0.44	24.29	364.1	0.000
11	13.19	32.32	5.74	0.48	10	13.20	32.32	5.74	0.48	24.30	363.5	0.036
27	13.22	32.36	5.70	0.49	20	13.20	32.34	5.73	0.49	24.31	362.2	0.073
53	8.65	32.70	5.06	1.42	30	13.20	32.37	5.66	0.49	24.34	360.3	0.109
80	7.57	33.24	4.50	1.79	50	9.05	32.56	5.14	1.38	25.22	276.6	0.172
106	8.05	33.66	3.29	2.23	75	7.58	33.13	4.61	1.72	25.89	213.6	0.234
160	7.90	33.86	2.83	2.36	100	8.00	33.62	3.45	2.15	26.21	183.4	0.283
212	6.56	33.94	3.08	2.23	150	7.97	33.83	2.84	2.36	26.38	168.1	0.371
315	5.64	33.96	1.99	2.74	200	6.80	33.93	3.06	2.25	26.62	145.4	0.449
416	4.91	34.05	1.26	3.06	250	6.17	33.94	2.87	2.29	26.72	137.0	0.520
618	4.35	34.25	0.43	3.30	300	5.75	33.95	2.15	2.65	26.78	131.7	0.587
919	3.71	34.40	0.34	3.41	400	5.01	34.04	1.35	3.02	26.94	117.3	0.711
1245	3.23[a]	34.47	0.47	3.40	500	4.62	34.13	0.83	3.19	27.05	107.1	0.824
					600	4.39	34.23	0.47	3.28	27.16	98.0	0.926
					700	4.16	34.31	0.35	3.34	27.24	90.2	1.020
					800	3.95	34.36	0.34	3.38	27.30	85.1	1.109
					1000	3.54	34.42	0.35	3.42	27.39	77.7	1.271

205 BLACK DOUGLAS; November 19, 1949; 1044 GCT; 44°12'N, 128°37'W; sounding, 1,500 fm; wind, 090°, force 5; weather, partly cloudy; sea, very rough; wire angle, 8°.

0	13.9	32.66E	5.69	0.55	0	13.9	32.66	5.69	0.55	24.42	352.1	0.000
11	13.88	32.66	5.54	0.48	10	13.88	32.66	5.54	0.48	24.42	351.9	0.035
28	13.90	32.66	5.64	0.52	20	13.89	32.66	5.57	0.49	24.42	352.3	0.070
54	13.57	32.68	5.78	0.56	30	13.90	32.66	5.64	0.52	24.42	352.8	0.106
81	8.92	32.75	5.95	1.04	50	13.70	32.67	5.75	0.55	24.47	348.5	0.176
107	7.82	32.75	5.53	1.17	75	9.45	32.74	5.93	0.99	25.30	269.5	0.253
160	7.39	33.04	5.20	1.46	100	7.92	32.75	5.60	1.15	25.54	246.8	0.318
212	7.18	33.77	3.88	1.93	150	7.44	32.93	5.27	1.39	25.75	227.9	0.437
314	5.82	33.93	3.07	2.22	200	7.25	33.71	4.21	1.85	26.39	167.7	0.535
416	5.08	33.95	2.02	2.62	250	6.60	33.86	3.46	2.02	26.60	148.5	0.614
618	4.54	34.23	0.58	3.18	300	5.95	33.92	3.16	2.18	26.73	136.5	0.686
919	3.64	34.38	0.35	3.34	400	5.14	33.94	2.17	2.56	26.84	126.3	0.816
1244	3.06	34.49	0.51	3.29	500	4.82	34.07	1.30	2.87	26.98	114.0	0.937
					600	4.58	34.21	0.64	3.15	27.12	101.6	1.045
					700	4.27	34.28	0.41	3.28	27.21	93.9	1.143
					800	3.93	34.33	0.35	3.32	27.28	87.3	1.233
					1000	3.43	34.41	0.36	3.34	27.40	77.2	1.398

a) Left thermometer reading of 3.45° rejected.

E See footnote page 289.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

BLACK DOUGLAS; November 19, 1949; 0004 GCT; 44°09'N, 129°33'W; sounding, 1,580 fm; wind, 070°, force 6; weather, overcast; sea, very rough; wire angle, 24°. 206

0	14.5	32.70E	5.46	0.30	0	14.5	32.70	5.46	0.30	24.33	360.6	0.000
11	14.48	32.70	5.65	0.44	10	14.48	32.70	5.64	0.44	24.33	360.8	0.036
26	14.50	32.70	5.65	0.49	20	14.48	32.70	5.65	0.47	24.33	361.0	0.072
51	14.50	32.70	5.66	0.45	30	14.50	32.70	5.65	0.49	24.33	361.7	0.108
76	9.92	32.71	5.87	0.87	50	14.50	32.70	5.65	0.45	24.33	362.2	0.181
92	8.16	32.74	5.91	1.08	75	10.40	32.71	5.86	0.84	25.12	287.0	0.262
141	7.35	32.74	6.04	1.18	100	7.92	32.74	5.92	1.10	25.53	247.6	0.329
191	7.38	33.06	5.34	1.34	150	7.35	32.75	6.00	1.20	25.62	239.9	0.450
291	6.61	33.78	3.70	2.00	200	7.38	33.14	5.17	1.40	25.93	211.6	0.564
384	5.72	33.85u	2.99	2.29	250	7.08	33.63	4.26	1.74	26.35	172.2	0.659
570	4.79	33.95	1.73	2.62	300	6.50	33.79	3.58	2.05	26.56	153.1	0.740
848	3.88	34.06r	1.92r	2.81r	400	5.62	33.86	2.90	2.32	26.72	138.2	0.886
1251	3.30	34.47	0.56	3.17	500	5.08	33.91	2.26	2.46	26.83	128.8	1.020
					600	4.66	33.98	1.50	2.70	26.93	119.6	1.144
					700	4.29	34.14	0.77	3.03	27.10	104.4	1.256
					800	3.99	34.26	0.56	3.20	27.22	92.9	1.355
					1000	3.61	34.37	0.57	3.19	27.35	82.2	1.530

BLACK DOUGLAS; November 18, 1949; 1536 GCT; 44°06'N, 130°29'W; sounding, 1,750 fm; wind, 010°, force 3; weather, overcast; sea, rough; wire angle, 9°. 207

0	14.5	32.71E	5.54	0.48	0	14.5	32.71	5.54	0.48	24.34	359.5	0.000
11	14.46	32.75	5.52	0.45	10	14.47	32.75	5.52	0.45	24.37	356.9	0.036
28	14.47	32.71	5.48	0.48	20	14.47	32.74	5.50	0.46	24.37	357.7	0.071
54	14.42	32.74	5.24	0.46	30	14.45	32.71	5.45	0.48	24.35	359.9	0.107
79	8.94	32.74	6.01	1.15	50	14.43	32.73	5.25	0.46	24.36	358.7	0.179
105	7.69	32.75	5.87	1.22	75	10.15	32.74	6.00	1.12	25.18	280.8	0.259
157	7.74	33.08	5.25	1.44	100	7.73	32.74	5.90	1.20	25.56	245.0	0.325
209	7.59	33.87	2.96	2.05	150	7.75	33.01	5.34	1.40	25.77	225.8	0.443
312	6.59	34.00	2.36	2.36	200	7.64	33.83	3.65	1.99	26.43	164.3	0.540
414	5.69	34.06	1.42	2.86	250	7.23	33.94	2.93	2.18	26.58	150.9	0.619
617	4.42	34.18	0.65	3.22	300	6.69	33.99	2.46	2.32	26.69	140.6	0.692
919	3.69	34.38	0.35	3.18	400	5.82	34.05	1.53	2.81	26.85	126.5	0.825
1242	3.12	34.47	0.46	3.14	500	5.03	34.11	1.01	3.08	26.99	113.3	0.945
					600	4.48	34.17	0.69	3.22	27.10	103.5	1.054
					700	4.17	34.23	0.50	3.22	27.18	96.3	1.153
					800	3.97	34.31	0.40	3.20	27.26	89.0	1.247
					1000	3.50	34.42	0.35	3.17	27.40	77.2	1.413

BLACK DOUGLAS; November 18, 1949; 0751 GCT; 44°03'N, 131°24'W; sounding, 1,980 fm; wind, 280°, force 1; weather, partly cloudy; sea, very rough; wire angle, 0°. 208

0	14.2	32.70E	5.57	0.54	0	14.2	32.70	5.57	0.54	24.39	355.1	0.000
11	14.20	32.70	5.40	0.47	10	14.20	32.70	5.40	0.47	24.39	355.0	0.036
28	14.21	32.70	5.51	0.49	20	14.20	32.70	5.45	0.48	24.39	355.4	0.071
54	14.17	32.70	5.67	0.52	30	14.21	32.70	5.52	0.49	24.39	355.9	0.107
82	10.70	32.72	6.11	0.93	50	14.20	32.70	5.63	0.51	24.39	356.3	0.178
108	8.88	32.77	5.98	1.09	75	12.88	32.71	6.07	0.85	24.67	330.4	0.264
162	8.09	33.03	5.26	1.41	100	9.20	32.75	6.02	1.05	25.35	265.5	0.338
215	7.28	33.80	3.60	2.03	150	8.24	32.94	5.42	1.32	25.64	238.0	0.464
319	5.68	33.91	2.84	2.49	200	7.56	33.74	3.93	1.90	26.37	169.7	0.566
422	4.93	33.91	1.89	2.79	250	6.69	33.86	3.24	2.23	26.59	149.6	0.646
627	4.41	34.18	0.53	3.24	300	5.94	33.91	2.93	2.43	26.72	137.2	0.717
930	-	34.36	0.29	3.48	400	5.04	33.91	2.11	2.73	26.83	127.3	0.849
1257	3.02	34.45	0.48	3.35	500	4.67	34.01	1.12	2.98	26.95	116.5	0.971
					600	4.46	34.16	0.60	3.20	27.09	104.1	1.081
					700	4.24	34.22	0.40	3.35	27.16	98.0	1.182
					800	3.99	34.27	0.31	3.45	27.23	92.2	1.278
					1000	3.44	34.40	0.30	3.47	27.39	78.0	1.449

E See footnote page 289.

SIO

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4911

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
209	BLACK DOUGLAS; November 17, 1949; 2338 GCT; 44°01'N, 132°20'W; sounding, 1,940 fm; wind, 280°, force 1; weather, partly cloudy; sea, very rough; wire angle, 5°.											
0	14.1	32.71E	5.67	0.64	0	14.1	32.71	5.67	0.64	24.43	351.7	0.000
11	14.07	32.71	5.64	0.64	10	14.07	32.71	5.64	0.64	24.43	352.0	0.035
28	14.04	32.71	5.55	0.66	20	14.05	32.71	5.57	0.64	24.43	351.7	0.070
56	14.02	32.72	5.63	0.70	30	14.04	32.71	5.55	0.66	24.43	351.8	0.106
83	9.32	32.73	5.93	1.17	50	14.03	32.72	5.60	0.70	24.44	351.4	0.176
110	8.18	32.75	5.84	1.29	75	10.15	32.73	5.87	1.08	25.18	281.5	0.255
162	7.30	32.79	5.99	-	100	8.48	32.74	5.87	1.26	25.45	255.5	0.322
213	6.71	33.69	4.73	1.73	150	7.47	32.78	5.95	1.43	25.63	239.0	0.446
316	5.79	33.91	3.26	2.36	200	6.86	33.60	5.02	1.66	26.36	170.8	0.548
417	4.92	33.96	1.76	2.87	250	6.38	33.80	4.17	1.95	26.58	150.1	0.628
617	4.00	34.16	0.70	3.26	300	5.96	33.89	3.50	2.26	26.70	138.8	0.701
916	3.46	34.06r	2.48r	2.83r	400	5.02	33.96	1.94	2.80	26.87	123.4	0.831
1240	3.32[a]	34.47	0.32	3.38	500	4.49	34.03	1.22	3.12	26.99	113.0	0.949
					600	4.06	34.15	0.75	3.26	27.13	100.2	1.057
					700	3.75	34.21	0.54	3.33	27.21	93.2	1.153
					800	3.58	34.26	0.38	3.36	27.26	88.4	1.244
					1000	3.40	34.37	0.32	3.38	27.37	79.7	1.412
210	BLACK DOUGLAS; November 17, 1949; 1640 GCT; 43°58'N, 133°15'W; sounding, 2,080 fm; wind, 270°, force 2; weather, overcast; sea, high; wire angle, 6°.											
0	13.8	32.68E	5.71	0.48	0	13.8	32.68	5.71	0.48	24.46	348.5	0.000
11	13.78	32.67	5.71	0.49	10	13.80	32.67	5.71	0.49	24.45	349.4	0.035
28	13.79	32.66	5.65	0.49	20	13.79	32.67	5.66	0.49	24.45	349.6	0.070
54	13.80	32.66	5.74	0.51	30	13.79	32.66	5.65	0.49	24.44	350.7	0.105
81	9.22	32.81	6.01	0.96	50	13.80	32.66	5.70	0.50	24.44	351.2	0.175
107	7.77	32.77	5.95	1.14	75	10.10	32.80	5.99	0.88	25.24	275.7	0.253
160	6.82	32.92	5.75	1.34	100	8.05	32.78	5.98	1.10	25.55	246.5	0.319
212	6.48	33.66	4.83	1.52	150	6.91	32.85	5.80	1.30	25.76	226.8	0.437
316	5.73	33.80	3.79	1.84	200	6.54	33.55	5.06	1.48	26.36	170.2	0.536
416	4.87	33.95	3.24	2.20	250	6.25	33.73	4.34	1.65	26.54	153.7	0.617
618	4.02	34.10	0.98	2.73	300	5.87	33.78	3.89	1.80	26.63	145.8	0.692
920	3.36	34.29	0.38	3.05	400	4.96	33.92	3.34	2.15	26.85	125.7	0.827
1245	2.90	34.42	0.39	3.09	500	4.43	34.03	2.34	2.45	26.99	112.4	0.946
					600	4.07	34.09	1.08	2.70	27.08	104.8	1.056
					700	3.79	34.15	0.65	2.85	27.15	98.1	1.156
					800	3.57	34.22	0.47	2.97	27.23	91.3	1.252
					1000	3.24	34.34	0.38	3.07	27.36	80.3	1.424
301	BLACK DOUGLAS; November 23, 1949; 1057 GCT; 42°40'N, 125°00'W; sounding, 800 fm; wind, 160°, force 2; weather, continuous slight rain; sea, rough; wire angle, 12°.											
0	12.9	32.39E	6.04	0.64	0	12.9	32.39	6.04	0.64	24.41	352.8	0.000
11	12.61	32.43	5.92	0.67	10	12.62	32.43	5.93	0.66	24.51	344.6	0.035
27	12.48	32.47	5.83	0.68	20	12.54	32.45	5.87	0.67	24.52	342.0	0.069
53	10.89	32.84	5.58	1.24	30	12.48	32.49	5.82	0.69	24.56	338.5	0.103
80	9.02	33.53	4.57	1.84	50	11.88	32.72	5.63	1.12	24.88	310.9	0.168
107	8.54	33.67	3.88	2.16	75	9.20	33.47	4.90	1.77	25.91	211.8	0.233
159	8.12	33.69	2.78	2.43	100	8.62	33.65	4.01	2.10	26.14	190.0	0.284
211	7.43	34.05	1.28	2.69	150	8.20	33.69	3.00	2.38	26.24	181.8	0.377
312	6.52	34.07	1.43	3.06	200	7.55	34.01	1.86	2.64	26.58	149.4	0.459
412	5.93	34.11	1.16	3.02	250	7.05	34.06	1.62	2.90	26.69	139.7	0.532
611	4.84	34.24	0.61	3.24	300	6.60	34.07	1.45	3.04	26.76	133.8	0.600
910	3.92	34.37	0.45	3.24	400	5.97	34.10	1.20	3.02	26.87	124.6	0.729
1239	3.10	34.34	0.55	3.20	500	5.50	34.16	0.91	3.10	26.97	115.5	0.849
					600	4.89	34.23	0.63	3.23	27.10	103.9	0.959
					700	4.53	34.30	0.51	3.24	27.20	95.4	1.058
					800	4.27	34.34	0.45	3.24	27.26	90.3	1.151
					1000	3.63	34.37	0.46	3.23	27.34	82.5	1.325

a) Left thermometer reading of 3.63° rejected.

E See footnote page 289.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

BLACK DOUGLAS; November 23, 1949; 1906 GCT; 42°35'N, 125°54'W; sounding, 1,500 fm; wind, 210°, force 5; weather, moderate fog in last hour - none at time of observation; sea, high; wire angle, 36°. 302

0	13.0	32.45E		0	13.0	32.45		24.44	350.1	0.000
9	12.94	32.45		10	12.92	32.45		24.46	348.8	0.035
21	12.80	32.45		20	12.82	32.45		24.48	347.0	0.070
41	10.05	33.30		30	11.50	32.58		24.82	314.2	0.103
61	8.38	33.49		50	9.13	33.56		25.99	203.5	0.155
45u	9.64	33.57		75	8.32	33.60		26.15	189.0	0.204
104	8.17	33.90		100	8.19	33.88		26.39	166.8	0.248
198	7.32	34.03		150	7.80	33.98		26.52	154.5	0.328
292	6.48	34.10		200	7.30	34.03		26.64	144.5	0.404
459	5.42	34.18		250	6.84	34.07		26.73	136.3	0.473
732	4.41	34.32		300	6.41	34.10		26.81	129.0	0.540
1141	3.30	34.23r		400	5.70	34.15		26.94	117.6	0.663
				500	5.27	34.20		27.03	109.7	0.777
				600	4.89	34.26		27.12	101.7	0.883
				700	4.53	34.30		27.20	95.4	0.981
				800	4.17	34.35		27.27	88.3	1.073
				1000	3.55	-		-	-	-

BLACK DOUGLAS; November 24, 1949; 0404 GCT; 42°30'N, 126°48'W; sounding, 1,380 fm; wind, 180°, force 3; weather, drizzle; sea, very rough; wire angle, 14°. 303

0	14.1	32.55E	5.67	0	14.1	32.55	5.67	24.29	364.2	0.000
11	14.02	32.57	5.84	10	14.03	32.57	5.85	24.32	361.3	0.036
27	14.02	32.57	5.61	20	14.02	32.57	5.70	24.33	361.5	0.072
52	10.57	32.59	5.86	30	14.01	32.57	5.63	24.33	361.8	0.109
77	6.96	32.77	5.84	50	11.35	32.58	5.84	24.85	311.7	0.176
103	8.54	33.23	4.84	75	6.97	32.75	5.84	25.67	233.9	0.244
124p	8.29	33.98	2.39	100	8.40	33.13	5.21	25.77	225.5	0.302
222p	6.85	34.07	1.88	150	7.82	34.02	2.18	26.55	151.8	0.396
320p	6.02	34.09	1.13	200	7.08	34.06	1.95	26.69	139.3	0.468
553p	4.95	34.23	0.51	250	6.53	34.08	1.67	26.78	131.3	0.536
856p	3.91	34.36	0.35	300	6.13	34.08	1.27	26.83	126.8	0.600
1181p	3.26	34.47	0.57	400	5.58	34.14	0.82	26.95	116.8	0.722
				500	5.15	34.20	0.57	27.05	108.1	0.835
				600	4.79	34.26	0.46	27.13	100.6	0.939
				700	4.43	34.30	0.40	27.21	94.2	1.036
				800	4.08	34.34	0.35	27.28	88.0	1.127
				1000	3.50	34.41	0.40	27.39	77.9	1.294

BLACK DOUGLAS; November 24, 1949; 1213 GCT; 42°25'N, 127°41'W; sounding, 1,560 fm; wind, 200°, force 3; weather, drizzle; sea, very rough; wire angle, 13°. 304

0	14.3	32.70E	5.67	0	14.3	32.70	5.67	24.38	356.1	0.000
11	14.25	32.71	5.94	10	14.26	32.71	5.94	24.39	355.7	0.036
27	14.22	32.71	5.81	20	14.23	32.71	5.86	24.39	355.3	0.071
52	9.98	32.66	5.72	30	14.17	32.71	5.78	24.41	354.3	0.105
78	7.86	32.69	5.75	50	10.18	32.66	5.72	25.12	286.6	0.171
103	11.62r	32.73	5.67	75	7.93	32.68	5.74	25.49	251.8	0.238
154	8.46	33.82	3.07	100	7.90	32.72	5.68	25.52	248.8	0.301
204	7.59	33.97	2.02	150	8.45	33.80	3.36	26.29	177.2	0.407
304	6.85	34.05	1.56	200	7.64	33.96	2.04	26.53	154.5	0.490
402	6.09	34.11	1.14	250	7.22	34.01	1.77	26.63	145.6	0.564
598	5.05	34.19	0.85	300	6.87	34.05	1.57	26.71	138.8	0.636
884	3.98	34.29	0.62	400	6.11	34.11	1.14	26.86	125.6	0.768
1200	3.28	34.45	0.51	500	5.48	34.15	0.97	26.97	116.1	0.889
				600	5.04	34.19	0.84	27.05	108.8	1.002
				700	4.65	34.23	0.75	27.13	102.0	1.107
				800	4.28	34.26	0.67	27.19	96.4	1.206
				1000	3.62	34.36	0.56	27.34	83.1	1.386

E See footnote page 289.

SIO

CCOFI
4911

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
305	BLACK DOUGLAS; November 24, 1949; 2020 GCT; 42°21'N, 128°35'W; sounding, 1,800 fm; wind, 210°, force 4; weather, cloudy; sea, high; wire angle, 5°.											
0	14.40	32.56E	5.91		0	14.40	32.56	5.91		24.24	369.1	0.000
11	13.98	32.48	5.53		10	14.00	32.48	5.53		24.27	367.4	0.037
28	14.00	32.66	5.62		20	13.99	32.55	5.59		24.31	362.3	0.073
56	11.82	33.03	5.47		30	14.00	32.67	5.61		24.41	353.9	0.109
83	9.22	33.42	4.47		50	12.95	32.94	5.50		24.83	314.3	0.176
110	8.63	33.58	3.93		75	9.51	33.35	4.89		25.77	225.4	0.243
164	7.98	33.70	3.34		100	8.79	33.53	4.09		26.02	201.5	0.297
218	7.17	33.89	3.09		150	8.17	33.67	3.43		26.23	182.6	0.393
320	6.18	34.03	1.78		200	7.42	33.83	3.19		26.46	161.0	0.478
423	5.47	34.05	1.30		250	6.83	33.96	2.75		26.64	144.9	0.555
627	4.60	34.16	0.95		300	6.36	34.02	2.07		26.76	134.2	0.625
931	3.90	34.35	0.54		400	5.59	34.05	1.36		26.88	123.7	0.754
1258	3.10	34.42	0.43		500	5.08	34.07	1.16		26.95	117.0	0.874
					600	4.70	34.14	1.00		27.05	108.2	0.987
					700	4.41	34.22	0.81		27.14	99.9	1.091
					800	4.18	34.29	0.67		27.23	93.0	1.187
					1000	3.74	34.37	0.50		27.33	83.7	1.364
306	BLACK DOUGLAS; November 25, 1949; 0340 GCT; 42°16'N, 129°29'W; sounding, 1,800 fm; wind, 220°, force 6; weather, overcast; sea, high; wire angle, 25°.											
0	15.00	32.66E	5.47		0	15.00	32.66	5.47		24.19	373.9	0.000
10	14.91	32.66	5.35		10	14.91	32.66	5.35		24.21	372.5	0.037
25	14.88	32.66	5.46		20	14.88	32.66	5.43		24.22	372.3	0.075
49	14.64	32.66	5.54		30	14.86	32.66	5.48		24.22	372.0	0.112
73	9.48	32.72	6.04		50	13.74	32.66	5.55		24.43	351.2	0.184
97	8.89	32.77	5.64		75	9.42	32.72	6.04		25.29	270.6	0.262
144	7.78	32.86	5.68		100	8.79	32.78	5.64		25.44	257.1	0.328
191	7.83	33.58	3.72		150	7.76	32.89	5.63		25.68	234.8	0.450
285	6.60	33.58	3.20		200	7.73	33.58	3.60		26.22	184.0	0.556
378	5.95	33.59	3.28		250	6.97	33.58	3.28		26.33	174.4	0.645
563	4.83	34.10	0.95		300	6.50	33.58	3.21		26.39	168.8	0.730
849	3.91	34.25	0.45		400	5.81	33.62	2.87		26.51	158.3	0.894
1268	3.10	34.02r	1.69r		500	5.16	33.96	1.74		26.86	126.1	1.037
					600	4.65	34.13	0.76		27.05	108.5	1.154
					700	4.30	34.20	0.52		27.14	100.1	1.258
					800	4.02	34.23	0.46		27.19	95.6	1.356
					1000	3.58	(34.31)	–		(27.30)	(86.3)	(1.538)
307	BLACK DOUGLAS; November 25, 1949; 1227 GCT; 42°11'N, 130°22'W; sounding, 2,000 fm; wind, 250°, force 4; weather, partly cloudy; sea, high; wire angle, 5°.											
0	15.60	32.70E	5.76		0	15.60	32.70	5.76		24.09	383.6	0.000
12	15.24	32.70	5.54		10	15.25	32.70	5.56		24.17	376.4	0.038
28	15.24	32.69	5.40		20	15.25	32.70	5.46		24.17	376.6	0.076
55	15.25	32.69	6.02		30	15.25	32.69	5.42		24.16	377.5	0.113
82	10.10	32.74	5.98		50	15.25	32.69	5.96		24.16	378.0	0.189
109	8.46	32.77	5.88		75	11.51	32.73	5.99		24.94	304.3	0.274
162	7.62	32.84	5.70		100	8.76	32.76	5.91		25.42	258.2	0.345
214	7.46	33.77	3.86		150	7.73	32.82	5.75		25.62	239.8	0.469
319	6.74	34.02	1.76		200	7.51	33.71	4.52		26.35	171.2	0.572
423	5.97	34.13	1.09		250	7.29	33.88	2.88		26.52	156.2	0.653
629	4.83	34.18	0.61		300	6.90	33.99	1.99		26.66	143.6	0.728
935	3.73	34.36	0.39		400	6.10	34.12	1.20		26.87	124.6	0.862
1263	3.08	34.45	0.49		500	5.52	34.14	0.84		26.95	117.2	0.983
					600	4.97	34.17	0.65		27.04	109.3	1.096
					700	4.48	34.23	0.52		27.15	99.9	1.201
					800	4.11	34.30	0.44		27.24	91.3	1.297
					1000	3.57	34.39	0.39		27.37	80.2	1.468

E See footnote page 289.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

BLACK DOUGLAS; November 25, 1949; 2124, 2012 GCT; 42°06'N, 131°16'W; sounding, 2,200 fm; wind, 220°, force 6; weather, cloudy; sea, high; wire angle, 30°, 48°. 308

0	15.20	32.75E			0	15.20	32.75			24.22	371.6	0.000
9	14.96	32.74			10	14.96	32.74			24.26	367.5	0.037
23	14.95	32.74			20	14.95	32.74			24.26	367.5	0.074
44	14.94	32.74			30	14.95	32.74			24.26	367.9	0.111
66	13.03	32.78			50	14.94	32.74			24.27	368.2	0.184
88	9.98	32.83			75	11.75	32.80			24.95	303.4	0.268
131	8.02	32.81			100	9.22	32.83			25.41	259.9	0.339
174	7.34	33.19			150	7.65	32.88			25.68	234.2	0.462
					200	7.29	33.49			26.21	184.6	0.567
126	7.92	32.83			250	7.12	33.80			26.48	159.8	0.653
188	7.30	33.37			300	6.60	33.89			26.62	147.0	0.729
250	7.12	33.80			400	5.63	33.98			26.81	129.4	0.867
374	5.87	33.96			500	4.86	34.03			26.95	117.3	0.991
559	4.57	34.05			600	4.42	-			-	-	-
846	3.84	33.68r			700	4.14	-			-	-	-
					800	3.93	-			-	-	-
					1000	(3.52)	-			-	-	-

BLACK DOUGLAS; November 16, 1949; 0831 GCT; 41°57'N, 133°03'W; sounding, 2,250 fm; wind, 160°, force 7; weather, intermittent slight rain; sea, high; wire angle, 21°. 310

0	15.95	32.81E	5.64	0.48	0	15.95	32.81	5.64	0.48	24.10	382.3	0.000
10	15.33	32.84	5.37	0.52	10	15.33	32.84	5.37	0.52	24.26	368.2	0.038
25	15.32	32.83	5.42	0.49	20	15.32	32.83	5.40	0.49	24.25	368.7	0.074
50	15.33	32.84	5.40	0.52	30	15.31	32.83	5.42	0.49	24.25	368.8	0.111
75	11.44	32.82	5.60	0.71	50	15.33	32.84	5.40	0.52	24.26	369.0	0.185
100	9.82	32.81	5.65	0.82	75	11.44	32.82	5.60	0.71	25.02	296.6	0.268
85p	11.02	32.81	5.82r	0.96r	100	9.82	32.81	5.65	0.82	25.29	270.8	0.339
130	8.01	32.84	5.72	1.21	150	7.86	32.94	5.57	1.34	25.70	232.6	0.465
224	7.43	33.49	4.81	1.68	200	7.62	33.33	5.08	1.57	26.04	201.2	0.574
322	6.10	33.84	3.76	2.15	250	7.09	33.63	4.50	1.81	26.35	172.2	0.667
526	4.50	33.89	2.30	2.87	300	6.35	33.80	3.99	2.05	26.58	150.4	0.747
811	3.75	34.20	1.16	3.05	400	5.32	33.86	3.07	2.49	26.76	134.3	0.890
1126	3.12	34.45	0.39	3.36r	500	4.62	33.88	2.43	2.82	26.85	125.7	1.020
					600	4.25	33.95	1.98	2.96	26.95	117.3	1.141
					700	4.00	34.06	1.57	3.02	27.06	107.1	1.254
					800	3.77	34.19	1.20	3.05	27.19	95.7	1.355
					1000	3.35	34.39	0.64	-	27.39	77.7	1.528

BLACK DOUGLAS; November 12, 1949; 2255 GCT; 40°41'N, 125°41'W; sounding, 1,650 fm; wind, 140°, force 3; weather, partly cloudy; sea, very rough; wire angle, 37°. 402

0	13.38	32.72E	5.19	0.68	0	13.38	32.72	5.19	0.68	24.57	337.7	0.000
9	13.20	32.72	5.00	0.83	10	13.19	32.72	5.01	0.83	24.61	334.0	0.034
21	13.03	32.72	5.37	0.80	20	13.08	32.72	5.36	0.80	24.64	332.3	0.067
41	11.44	33.01	5.30	1.18	30	12.63	32.75	5.37	0.94	24.75	321.9	0.100
60	9.00	33.09	5.02	1.48	50	9.18	33.06	5.17	1.32	25.59	241.4	0.156
80	8.29	33.17	5.00	1.70	75	8.37	33.14	5.00	1.65	25.78	223.9	0.214
118	8.21	33.51	4.07	1.90	100	8.24	33.30	4.65	1.86	25.93	210.6	0.268
154	7.44	33.82	3.60	2.20	150	7.50	33.80	3.64	2.18	26.42	164.1	0.362
219	6.72	34.00	2.38	2.56	200	6.93	33.98	2.77	2.46	26.65	143.3	0.439
44p	9.35	33.04	5.46r	1.30r	250	6.41	34.02	2.00	2.69	26.75	134.2	0.508
132	7.34	33.82	3.62	2.02	300	5.69	34.05	1.56	2.86	26.86	123.7	0.572
420	5.41	34.30	0.42	3.32	400	5.44	34.10	0.95	3.11	26.93	118.0	0.693
928	3.80	34.43	0.45	3.35	500	5.01	34.18	0.59	3.23	27.05	108.0	0.806
					600	4.62	34.27	0.44	3.31	27.16	97.8	0.910
					700	4.33	34.35	0.42	3.34	27.26	89.3	1.003
					800	4.08	34.40	0.42	3.34	27.32	83.6	1.090
					1000	(3.65)	(34.44)	-	-	(27.40)	(77.4)	(1.250)

E See footnote page 289.

SIO

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4911

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

403 BLACK DOUGLAS; November 13, 1949; 0630 GCT; 40°32'N, 126°32'W; sounding, 1,695 fm; wind, 140°, force 4; weather, partly cloudy; sea, very rough; wire angle, 8°.

0	14.89	32.74E	4.94	0.66	0	14.89	32.74	4.94	0.66	24.27	366.2	0.000
12	14.75	32.74	5.37	0.63	10	14.75	32.74	5.35	0.63	24.31	363.3	0.037
28	14.76	32.74	5.28	0.61	20	14.75	32.74	5.32	0.62	24.31	363.5	0.073
54	14.73	32.74	5.50	0.63	30	14.76	32.74	5.27	0.61	24.31	363.8	0.109
82	12.84	32.82	5.67	0.96	50	14.74	32.74	5.47	0.62	24.31	364.3	0.182
108	9.81	33.17	5.07	1.61	75	14.18	32.79	5.65	0.80	24.46	349.9	0.271
162	8.00	33.51	4.19	2.03	100	10.70	33.08	5.33	1.51	25.36	265.1	0.348
214	7.27	33.95	2.52	2.52	150	8.19	33.43	4.40	1.94	26.04	200.9	0.464
318	6.16	34.05	1.64	2.99	200	7.50	33.85	2.94	2.40	26.47	150.6	0.553
420	5.31	34.11	1.13	3.14	250	6.82	34.00	2.08	2.74	26.68	141.3	0.625
622	4.61	34.27	0.40	3.47	300	6.33	34.04	1.74	2.93	26.78	132.3	0.694
923	3.68	34.43	0.54	3.57	400	5.43	34.10	1.23	3.11	26.93	117.9	0.818
1249	3.10	34.51	0.48	3.55	500	4.98	34.16	0.68	3.27	27.04	109.1	0.934
					600	4.67	34.25	0.42	3.44	27.14	99.8	1.037
					700	4.36	34.34	0.41	3.50	27.25	90.4	1.132
					800	4.05	34.39	0.50	3.54	27.32	84.0	1.219
					1000	3.45	34.46	0.55	3.57	27.43	73.6	1.377

404 BLACK DOUGLAS; November 13, 1949; 1347 GCT; 40°23'N, 127°22'W; sounding, 910 fm; wind, 160°, force 2; weather, cloudy; sea, slight; wire angle, 19°.

0	14.35	32.95E	5.61	0.66	0	14.35	32.95	5.61	0.66	24.55	339.7	0.000
10	14.23	32.95	5.17	0.62	10	14.23	32.95	5.17	0.62	24.58	337.5	0.034
24	14.22	32.95	5.53	0.60	20	14.21	32.95	5.50	0.60	24.58	337.7	0.068
48	12.34	33.01	5.60	1.01	30	14.20	32.96	5.57	0.63	24.59	336.7	0.101
72	10.16	33.01	5.35	1.41	50	12.02	33.01	5.59	1.04	25.06	292.1	0.164
96	9.68	33.31	4.77	1.70	75	10.07	33.01	5.29	1.44	25.41	259.6	0.233
143	9.08	33.60	3.65	2.15	100	9.64	33.35	4.73	1.76	25.74	228.0	0.294
190	7.82	33.93	2.64	2.43	150	8.97	33.65	3.49	2.20	26.09	196.2	0.400
284	6.90	34.02	1.93	2.68	200	7.65	33.95	2.53	2.46	26.52	155.4	0.488
379	6.19	34.08	1.24	2.97	250	7.20	33.98	2.17	2.59	26.61	147.6	0.564
563	5.02	34.15	0.67	3.23	300	6.77	34.01	1.77	2.74	26.69	140.5	0.636
843	4.93r	34.33	0.39	3.34	400	6.04	34.10	1.17	3.01	26.86	125.5	0.769
1157	3.35	34.46	0.63	3.32	500	5.38	34.14	0.86	3.16	26.97	115.4	0.889
					600	4.82	34.16	0.60	3.26	27.05	108.4	1.001
					700	4.34	34.23	0.47	3.30	27.16	98.3	1.105
					800	4.00	34.30	0.41	3.33	27.25	90.2	1.199
					1000	3.55	34.41	0.50	3.34	27.38	78.5	1.367

405 BLACK DOUGLAS; November 13, 1949; 2129 GCT; 40°14'N, 128°14'W; sounding, 2,440 fm; wind, 190°, force 2; weather, cloudy; sea, moderate; wire angle, 11°.

0	15.19	32.63E	5.65	0.62	0	15.19	32.63	5.65	0.62	24.13	380.3	0.000
10	15.02	32.59	5.51	0.62	10	15.02	32.59	5.51	0.62	24.13	379.6	0.038
25	15.00	32.59	5.47	0.65	20	15.00	32.59	5.47	0.64	24.13	379.5	0.076
49	14.32	32.70	5.61	0.72	30	15.00	32.60	5.48	0.66	24.14	379.0	0.114
73	9.48	33.16	5.11	1.61	50	13.55	32.73	5.60	0.78	24.55	341.3	0.186
98	10.17	33.18	5.05	1.63	75	9.50	33.16	5.09	1.62	25.62	239.4	0.259
146	8.25	33.40	4.39	1.99	100	10.16	33.18	5.03	1.63	25.53	248.8	0.320
194	7.55	33.91	2.84	2.52	150	8.17	33.43	4.24	2.04	26.04	200.7	0.432
288	6.46	34.00	2.07	2.84	200	7.50	33.92	2.75	2.54	26.52	155.3	0.521
382	5.69	34.09	1.05	3.30	250	6.92	33.97	2.41	2.69	26.64	144.6	0.595
576	4.86	34.23	0.45	3.51	300	6.33	34.01	1.93	2.92	26.75	134.6	0.666
866	5.72r	34.40	0.36	3.49r	400	5.60	34.11	0.93	3.32	26.92	119.3	0.793
1187	3.26	34.50	0.70	3.53	500	5.13	34.18	0.52	3.46	27.03	109.4	0.907
					600	4.78	34.25	0.40	3.52	27.13	101.1	1.012
					700	4.44	34.31	0.37	3.52	27.21	93.5	1.109
					800	4.11	34.37	0.36	3.52	27.30	86.0	1.199
					1000	3.60	34.45	0.48	3.53	27.41	76.2	1.361

E See footnote page 289.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

BLACK DOUGLAS; November 14, 1949; 0508 GCT; 40°05'N, 129°04'W; sounding, 2,480 fm; wind, calm; weather, overcast; sea, rough; wire angle, 0°. 406

0	14.77	32.47E	5.75	0.55	0	14.77	32.47	5.75	0.55	24.10	383.8	0.000
11	14.62	32.47	5.65	0.57	10	14.63	32.47	5.65	0.56	24.12	380.5	0.038
28	14.44	32.48	5.38	0.59	20	14.54	32.47	5.50	0.58	24.14	378.8	0.076
54	13.41	33.04	5.55	0.92	30	14.45	32.49	5.38	0.60	24.18	376.1	0.114
81	8.24	32.76	5.91	1.27	50	13.78	33.03	5.49	0.88	24.73	323.7	0.184
108	7.67	32.97	5.59	1.62	75	8.81	32.78	5.88	1.20	25.43	257.0	0.257
162	8.16	33.57	3.94	-	100	7.74	32.87	5.72	1.51	25.66	235.5	0.318
215	7.01	33.95	2.65	2.31	150	8.09	33.45	4.30	1.94	26.07	198.1	0.427
319	5.96	34.01	1.87	2.63	200	7.44	33.92	2.90	2.24	26.53	154.5	0.515
422	5.24	34.09	1.08	2.96	250	6.58	33.97	2.34	2.43	26.69	140.0	0.588
627	4.41	34.20	0.49	3.35	300	6.14	34.00	2.00	2.57	26.77	132.9	0.656
932	3.60	34.38	0.35	3.32	400	5.35	34.08	1.24	2.89	26.93	118.4	0.782
1261	3.04	34.52	0.73	3.20	500	4.85	34.13	0.78	3.16	27.03	109.8	0.896
					600	4.49	34.18	0.53	3.32	27.11	102.8	1.003
					700	4.20	34.24	0.40	3.35	27.18	96.0	1.102
					800	3.93	34.30	0.36	3.34	27.26	89.4	1.195
					1000	3.40	34.43	0.39	3.30	27.42	75.2	1.359

BLACK DOUGLAS; November 14, 1949; 1437 GCT; 39°56'N, 129°55'W; sounding, 2,400 fm; wind, calm; weather, drizzle; sea, smooth; wire angle, 0°. 407

0	16.00	32.72E	5.27	0.74	0	16.00	32.72	5.27	0.74	24.02	390.7	0.000
11	15.99	32.72	5.13	0.68	10	15.99	32.72	5.14	0.69	24.02	390.7	0.039
28	15.90	32.72	5.10	0.68	20	15.94	32.72	5.11	0.68	24.03	389.9	0.078
55	15.76	32.75	5.20	0.71	30	15.90	32.72	5.11	0.68	24.04	389.2	0.117
82	10.94	32.86	5.21	1.28	50	15.83	32.74	5.19	0.70	24.07	386.7	0.195
110	9.47	32.99	5.20	1.51	75	11.85	32.82	5.20	1.20	24.95	303.6	0.281
163	8.93	33.26	4.68	1.78	100	9.90	32.94	5.20	1.43	25.38	262.3	0.352
216	7.94	33.86	2.78	2.56	150	9.05	33.18	4.95	1.70	25.71	232.3	0.475
320	6.86	34.04	1.76	2.93	200	8.20	33.69	3.08	2.39	26.24	182.6	0.579
423	5.99	34.11	1.08	3.13	250	7.50	33.94	2.39	2.73	26.54	154.8	0.663
628	4.85	34.20	0.58	3.34	300	7.00	34.02	1.90	2.88	26.67	142.8	0.737
932	3.73	34.35	0.51	3.40	400	6.15	34.10	1.19	3.09	26.85	126.8	0.872
1261	3.12	-	-	-	500	5.54	34.15	0.81	3.23	26.96	116.8	0.994
					600	5.00	34.19	0.61	3.32	27.06	108.2	1.107
					700	4.49	34.23	0.54	3.37	27.15	100.0	1.211
					800	4.09	34.28	0.51	3.40	27.23	92.6	1.307
					1000	3.56	(34.37)	-	-	(27.35)	(81.6)	(1.481)

BLACK DOUGLAS; November 14, 1949; 2132 GCT; 39°47'N, 130°46'W; sounding, 2,480 fm; wind, 120°, force 3; weather, overcast; sea, moderate; wire angle, 9°. 408

0	16.00	32.66E	5.36	0.40	0	16.00	32.66	5.36	0.40	23.97	394.9	0.000
11	15.78	32.66	5.48	0.40	10	15.80	32.66	5.48	0.40	24.01	391.0	0.039
28	15.71	32.66	5.52	0.45	20	15.74	32.66	5.50	0.42	24.03	390.0	0.078
54	15.51	32.72	5.48	0.52	30	15.70	32.66	5.51	0.46	24.04	389.4	0.117
81	11.76[a]	32.83	5.86	0.87	50	15.60	32.70	5.48	0.50	24.09	384.9	0.195
107	9.64	33.04	5.38	1.36	75	12.65	32.79	5.74	0.80	24.77	320.5	0.283
160	9.06	33.40	4.42	1.77	100	9.90	32.98	5.53	1.28	25.42	259.4	0.355
214	8.21	33.86	2.60	2.57	150	9.24	33.31	4.71	1.66	25.78	225.6	0.476
315	7.02	34.02	2.21	2.95	200	8.40	33.80	2.85	2.45	26.29	177.3	0.578
417	5.99	34.09	1.32	3.16	250	7.84	33.94	2.40	2.74	26.49	159.6	0.662
620	4.84	34.23	0.70	3.36	300	7.28	34.01	2.28	2.91	26.62	147.2	0.738
921	3.91	34.37	0.35	3.44	400	6.12	34.08	1.42	3.13	26.83	128.0	0.876
1247	3.18	34.50	0.57	3.42	500	5.44	34.15	1.02	3.26	26.97	115.6	0.997
					600	4.91	34.22	0.74	3.35	27.09	105.1	1.108
					700	4.56	34.27	0.54	3.40	27.17	98.0	1.209
					800	4.25	34.32	0.40	3.42	27.24	91.6	1.304
					1000	3.65	34.41	0.39	3.44	27.37	79.7	1.475

a) Middle thermometer reading of 11.09° rejected.

E See footnote page 289.

SIO

CCOFI

4911

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

409 BLACK DOUGLAS; November 15, 1949; 0418 GCT; 39°38'N, 131°36'W; sounding, 2,450 fm; wind, 110°, force 3; weather, overcast; sea, rough; wire angle, 13°.

0	16.30	32.69 E	5.52	0.47	0	16.30	32.69	5.52	0.47	23.92	399.3	0.000
11	16.11	32.75	5.30	0.49	10	16.13	32.75	5.31	0.49	24.01	391.5	0.040
27	16.10	32.73	5.39	0.52	20	16.10	32.73	5.32	0.51	24.00	392.5	0.079
53	15.92	32.83	5.47	0.55	30	16.10	32.73	5.40	0.52	24.00	392.8	0.118
80	10.64	32.84	5.90	0.84	50	16.06	32.82	5.43	0.54	24.08	386.1	0.196
106	9.57	32.84	5.67	1.02	75	11.02	32.84	5.88	0.80	25.11	287.7	0.280
158	8.90	33.07	5.26	1.36	100	9.73	32.84	5.71	0.99	25.33	267.2	0.350
210	7.65	33.77	4.04	1.93	150	8.99	33.00	5.34	1.31	25.58	244.8	0.477
312	6.72	33.96	3.26	2.39	200	7.80	33.72	4.23	1.84	26.32	174.6	0.583
414	5.63	34.02	1.87	2.86	250	7.25	33.87	3.69	2.11	26.52	156.5	0.665
609	4.51	34.18	0.73	3.38	300	6.84	33.95	3.35	2.32	26.63	145.9	0.740
908	3.69	34.38	0.35	3.54	400	5.76	34.01	2.09	2.80	26.82	128.7	0.878
1233	3.08	34.49	0.57	3.51	500	5.09	34.09	1.14	3.16	26.97	115.5	1.000
					600	4.56	34.17	0.75	3.37	27.09	104.4	1.110
					700	4.19	34.24	0.55	3.46	27.19	95.8	1.210
					800	3.92	34.30	0.40	3.52	27.26	89.2	1.302
					1000	3.50	34.43	0.41	3.54	27.41	76.5	1.468

410 BLACK DOUGLAS; November 15, 1949; 1201 GCT; 39°29'N, 132°27'W; sounding, 2,220 fm; wind, 120°, force 5; weather, overcast; sea, very rough; wire angle, 43°.

0	16.40	32.86 E	5.63	0.38	0	16.40	32.86	5.63	0.38	24.03	389.1	0.000
8	16.09	32.86	-	-	10	16.08	32.86	5.43	0.41	24.11	382.4	0.039
20	16.08	32.85	5.30	0.52	20	16.08	32.85	5.30	0.52	24.10	383.3	0.077
38	16.12	32.89	5.14	0.51	30	16.10	32.87	5.20	0.51	24.11	382.6	0.115
56	-	32.92	5.34	0.54	50	16.02	32.92	5.25	0.52	24.17	377.8	0.191
74	11.84	32.85	5.91	0.66	75	11.75	32.85	5.92	0.66	24.99	299.6	0.276
109	-	32.87	5.64	0.83	100	10.00	32.86	5.77	0.79	25.30	270.0	0.347
143	8.84	33.04	5.14	1.40	150	8.75	33.10	4.96	1.47	25.69	233.6	0.473
205	7.85	33.67	3.95	1.86	200	7.94	33.64	4.03	1.83	26.24	182.6	0.577
267	7.03	33.95	3.13	2.29	250	7.25	33.90	3.33	2.18	26.54	154.2	0.661
391	5.94	34.05	1.72	2.95	300	6.73	34.00	2.73	2.49	26.69	140.6	0.735
601	4.66	34.20	0.63	3.38	400	5.88	34.05	1.60	2.99	26.84	127.1	0.868
832p	4.03[a]	34.33	0.47	3.48	500	5.12	34.12	0.90	3.27	26.99	113.7	0.989
					600	4.66	34.20	0.64	3.38	27.10	103.3	1.097
					700	4.39	34.26	0.55	3.42	27.18	96.6	1.197
					800	4.12	34.31	0.50	3.46	27.25	90.7	1.291
					1000	(3.65)	(34.41)	-	-	(27.37)	(79.7)	(1.461)

461 BLACK DOUGLAS; November 12, 1949; 0449 GCT; 39°43'N, 124°24'W; sounding, 1,000 fm; wind, 140°, force 4; weather, overcast; sea, very rough; wire angle, 19°.

0	12.10	33.15 E	5.78	1.18	0	12.10	33.15	5.78	1.18	25.15	282.3	0.000
11	11.48	33.11	5.81	1.16	10	11.55	33.11	5.82	1.16	25.23	275.7	0.028
26	10.74	33.21	5.61	1.32	20	10.98	33.15	5.73	1.24	25.36	263.1	0.055
51	9.59	33.39	4.87	1.60	30	10.63	33.24	5.55	1.38	25.49	250.8	0.081
76	8.70	33.64	4.14	1.94	50	9.63	33.37	4.92	1.60	25.76	225.4	0.128
101	7.75	33.68	3.66	2.17	75	8.75	33.64	4.17	1.93	26.11	192.4	0.180
149	7.96	33.93	2.49	2.45	100	7.75	33.68	3.67	2.16	26.30	175.3	0.226
197	7.51	34.04	2.02	2.66	150	7.94	33.93	2.48	2.45	26.46	160.2	0.310
291	7.05	34.13	1.28	2.89	200	7.49	34.04	2.00	2.68	26.62	146.4	0.387
384	6.06	34.14	0.99	3.10	250	7.25	34.10	1.56	2.81	26.70	139.4	0.458
572	5.13	34.31	0.45	3.49	300	7.00	34.13	1.25	2.91	26.76	134.6	0.527
857	5.55r	34.42	0.38	3.47	400	5.93	34.15	0.94	3.15	26.91	120.3	0.656
1173	3.56[b]	34.49	0.63	3.43	500	5.39	34.23	0.63	3.40	27.04	108.9	0.769
					600	5.02	34.33	0.44	3.49	27.09	105.5	0.876
					700	4.64	34.37	0.40	3.49	27.24	91.5	0.975
					800	4.32	34.40	0.39	3.48	27.30	86.4	1.064
					1000	3.78	34.47	0.50	3.44	27.41	76.7	1.227

a) Left thermometer reading of 4.61° rejected.

b) Left thermometer reading of 4.16° rejected.

E See footnote page 289.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	
HORIZON; November 8, 1949; 2341 GCT; 38°50'N, 124°05'W; sounding, 1,100 fm; wind, 180°, force 2; weather, overcast; sea, very rough; wire angle, 13°.													501
0	11.89	32.90	6.25	1.16	0	11.89	32.90	6.25	1.16	25.00	296.7	0.000	
9	11.84	33.10	6.16	1.15	10	11.85	33.10	6.16	1.15	25.16	281.4	0.029	
23	11.62	33.15	6.14	1.13	20	11.70	33.14	6.15	1.14	25.22	276.2	0.057	
47	10.92	33.28	5.85	1.56	30	11.42	33.18	6.10	1.16	25.30	268.7	0.084	
76	9.94	33.31	5.23	1.72	50	10.83	33.28	5.81	1.58	25.48	251.6	0.136	
99	9.32	33.55	3.74	1.85	75	9.98	33.31	5.28	1.72	25.66	235.8	0.197	
129	8.26	33.72	3.33	2.09	100	9.31	33.56	3.70	1.87	25.95	207.3	0.252	
203	7.50	33.92	3.15	2.22	150	8.04	33.79	3.26	2.16	26.34	172.1	0.347	
301	6.47	34.02	1.84	2.66	200	7.54	33.92	3.19	2.21	26.52	155.9	0.430	
395	5.81	34.07	1.06	2.97	250	6.97	33.98	2.46	2.41	26.64	144.5	0.504	
599	5.14	34.25	0.44	3.25	300	6.48	34.02	1.86	2.65	26.74	135.7	0.574	
901	4.10	34.38	0.37	3.29	400	5.78	34.07	1.05	2.98	26.87	124.4	0.704	
1162	3.40	34.23r	0.62	3.13	500	5.45	34.17	0.62	3.16	26.99	114.1	0.823	
					600	5.14	34.25	0.44	3.26	27.09	105.5	0.933	
					700	4.82	34.31	0.39	3.28	27.17	98.1	1.035	
					800	4.48	34.35	0.37	3.29	27.24	92.0	1.130	
					1000	3.76	(34.40)	0.45	3.25	(27.36)	(91.6)	(1.315)	
HORIZON; November 9, 1949; 0706 GCT; 38°39'N, 124°54'W; sounding, 2,000 fm; wind, 190°, force 7; weather, moderate rain shower; sea, very rough; wire angle, 48°.													502
0	11.62	33.02	6.01	1.19	0	11.62	33.02	6.01	1.19	25.14	283.4	0.000	
5	11.63	32.75	6.07	1.16	10	11.60	32.75	6.02	1.17	24.94	303.0	0.029	
15	11.54	32.77	5.93	1.19	20	11.45	32.81	5.69	1.26	25.02	296.0	0.059	
32	9.13	33.00	5.08	1.80	30	9.17	33.00	5.20	1.45	25.55	245.2	0.087	
52	8.99	33.22	4.41	2.08	50	9.00	33.21	4.44	2.06	25.73	227.7	0.134	
66	8.48	33.22	4.23	2.03	75	8.44	33.26	3.82	2.32	25.86	216.0	0.189	
87	8.42	33.47	3.26	2.39	100	8.29	33.71	2.97	2.45	26.24	180.7	0.239	
134	7.92	34.04	2.42	2.56	150	7.75	34.03	2.23	2.61	26.57	150.1	0.321	
199	7.28	34.01	1.68	2.75	200	7.27	34.01	1.67	2.75	26.63	145.5	0.396	
266	6.76	34.04	1.24	2.96	250	6.88	34.03	1.31	2.91	26.69	139.7	0.466	
395	5.74	34.14	0.68	3.24	300	6.53	34.07	1.04	3.05	26.77	132.8	0.535	
606	4.76	34.00r	-	3.45	400	5.70	(34.14)	0.66	3.22	(26.93)	(118.4)	(0.661)	
906	3.98	34.10r	0.33	3.56	500	5.15	-	0.54	3.36	-	-	-	
					600	4.79	-	0.45	3.44	-	-	-	
					700	4.46	-	0.40	3.52	-	-	-	
					800	4.18	-	0.35	3.55	-	-	-	
HORIZON; November 9, 1949; 1508 GCT; 38°28'N, 125°43'W; sounding, 2,300 fm; wind, 240°, force 6; weather, overcast; sea, high; wire angle, 30°.													503
0	15.16	32.72	5.47	0.52	0	15.16	32.72	5.47	0.52	24.20	372.8	0.000	
8	15.20	32.74	5.66	0.53	10	15.21	32.74	5.67	0.53	24.20	372.7	0.037	
21	15.23	32.75	5.69	0.83	20	15.22	32.75	5.69	0.83	24.21	372.4	0.074	
43	12.36	32.77	5.94	0.93	30	14.05	32.76	5.72	0.88	24.47	348.3	0.111	
69	11.32	33.04	5.61	1.31	50	12.10	32.78	5.90	1.02	24.86	310.6	0.176	
90	10.14	33.28	5.21	1.50	75	10.94	33.11	5.54	1.37	25.34	266.5	0.249	
117	9.43	33.49	4.39	1.88	100	9.85	33.37	5.00	1.60	25.72	229.8	0.311	
177	8.38[a]	33.82	2.59	2.35	150	8.84	33.69	3.32	2.21	26.14	191.4	0.416	
257	7.39	33.98	2.30	2.50	200	8.06	33.89	2.42	2.41	26.42	165.6	0.505	
340	6.74	34.05	1.53	2.71	250	7.48	33.97	2.31	2.48	26.56	152.2	0.584	
501	5.11	34.06	1.06	3.13	300	7.05	34.03	1.94	2.60	26.67	142.6	0.658	
753	4.32	34.31	0.32	3.35	400	5.95	34.06	1.32	2.90	26.84	127.3	0.793	
986	3.75	34.43	-	3.42	500	5.14	34.06	1.08	3.12	26.94	118.5	0.916	
					600	4.80	34.13	0.76	3.24	27.03	110.3	1.031	
					700	4.48	34.25	0.47	3.32	27.16	98.4	1.135	
					800	4.18	34.35	-	3.37	27.27	88.5	1.229	
					1000	(3.73)	(34.43)	-	(3.42)	(27.38)	(79.1)	(1.396)	

a) Middle thermometer reading of 8.74° rejected.

504 HORIZON; November 10, 1949; 0155 GCT; 38°22'N, 126°32'W; sounding, 2,550 fm; wind, 270°, force 5; weather, squally; sea, very high; wire angle, 20°.

OBSERVED					INTERPOLATED					COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m
0	13.90	32.88	5.90	0.64	0	13.90	32.88	5.90	0.64	24.59	335.8	0.000
10	13.32	32.88	5.53	0.63	10	13.32	32.88	5.53	0.63	24.71	324.8	0.033
24	12.99	33.17	5.76	0.90	20	13.07	33.15	5.70	0.82	24.97	300.5	0.064
48	11.46	33.17	5.49	1.16	30	12.68	33.17	5.74	0.96	25.06	292.1	0.094
78	10.42	33.24	5.27	1.53	50	11.34	33.17	5.48	1.20	25.31	268.3	0.150
103	8.99	33.35	4.50	1.72	75	10.50	33.23	5.31	1.50	25.51	250.3	0.215
135	8.44	33.66	3.33	2.05	100	9.12	33.32	4.75	1.70	25.81	222.0	0.274
212	8.09	34.05	2.06	2.67	150	8.34	33.83	2.88	2.28	26.32	173.5	0.373
316	-	33.98	1.87	2.78	200	8.16	34.05	2.14	2.65	26.53	154.2	0.454
425	6.24	34.14	0.92	3.29	250	7.68	34.02	1.98	2.68	26.57	151.4	0.531
631	5.06	33.98r	0.38	3.47	300	7.18	33.98	1.93	2.74	26.61	148.1	0.606
939	3.84	34.18r	0.40	3.49	400	6.38	34.11	1.11	3.21	26.82	129.1	0.744
1300	3.06	34.23r	0.79	3.44	500	5.81	-	0.63	3.39	-	-	-
					600	5.23	-	0.40	3.46	-	-	-
					700	4.71	-	0.38	3.48	-	-	-
					800	4.30	-	0.38	3.48	-	-	-
					1000	3.68	-	0.41	3.49	-	-	-

507 HORIZON; November 11, 1949; 0006 GCT; 37°45'N, 129°00'W; sounding, missing; wind, 270° force 5; weather, cloudy; sea, high; wire angle, 42°.

0	16.80	32.99	5.83	0.46	0	16.80	32.99	5.83	0.46	24.05	388.2	0.000
7	16.85	33.01	5.44r	0.46	10	16.86	33.01	5.82	0.46	24.04	388.5	0.039
18	16.87	32.99	5.82	0.48	20	16.87	32.99	5.80	0.47	24.03	390.2	0.078
38	-	33.00	5.73	0.46	30	16.85	32.99	5.76	0.46	24.04	389.7	0.117
60	16.79	32.99	-	0.48	50	16.81	33.00	5.79	0.48	24.04	389.2	0.195
78	13.18	32.95	6.23	0.47	75	13.95	32.95	6.20	0.47	24.64	333.5	0.285
115	9.86	32.52	5.85	0.93	100	10.60	32.97	6.10	0.74	25.28	271.6	0.361
149	8.87	33.21	4.93	1.49	150	8.84	33.22	4.93	1.50	25.77	226.1	0.485
213	7.86	33.78	3.02	2.05	200	8.05	33.70	3.20	1.98	26.27	179.7	0.587
284	6.98	33.95	2.84	2.29	250	7.38	33.90	2.92	2.18	26.52	156.0	0.670
427	5.56	34.01	-	2.85	300	6.80	33.97	2.72	2.34	26.66	143.9	0.745
655	4.34	34.25	0.44	3.13	400	5.80	34.00	1.77	2.77	26.81	129.8	0.882
975	3.64	34.41	0.48	3.19	500	5.04	34.07	1.02	3.00	26.96	116.5	1.005
					600	4.53	34.19	0.54	3.10	27.11	102.7	1.115
					700	4.20	34.29	0.44	3.15	27.22	92.3	1.212
					800	3.97	34.35	0.44	3.17	27.29	86.1	1.301
					1000	(3.60)	(34.42)	(0.47)	(3.19)	(27.39)	(78.4)	(1.465)

508 HORIZON; November 11, 1949; 0718 GCT; 37°32'N, 129°48'W; sounding, 2,500 fm; wind, 270°, force 4; weather, partly cloudy; sea, very rough; wire angle, 35°.

0	16.90	32.88	5.16	0.43	0	16.90	32.88	5.16	0.43	23.93	398.7	0.000
8	16.91	32.71	5.29	0.45	10	16.91	32.72	5.29	0.45	23.81	411.0	0.040
20	16.95	32.95	5.27	0.44	20	16.95	32.95	5.27	0.44	23.70	395.1	0.081
41	-	32.96	5.19	0.45	30	16.95	32.96	5.20	0.44	23.98	394.6	0.120
66	12.80	32.86	5.88	0.50	50	16.95	32.94	5.27	0.46	23.97	396.5	0.199
86	10.53	32.83	5.58	0.79	75	11.48	32.84	5.79	0.62	25.03	295.5	0.286
131	9.04	33.12	4.93	1.26	100	9.97	32.85	5.39	0.94	25.30	270.2	0.357
176	8.14	33.58	3.68	1.81	150	8.62	33.36	4.60	1.48	25.91	212.5	0.477
262	7.08	33.91	3.21	2.18	200	7.79	33.72	3.48	1.93	26.32	174.4	0.574
349	6.23	33.98	1.99	2.66	250	7.20	33.90	3.27	2.13	26.55	153.5	0.656
519	5.08	34.12	0.70	3.14	300	6.68	33.95	2.73	2.35	26.66	143.5	0.730
777	3.94	34.29	0.40	3.32	400	5.83	34.01	1.48	2.91	26.81	129.6	0.866
1111	3.34	34.43	0.62	3.26	500	5.20	34.10	0.80	3.12	26.96	116.2	0.989
					600	4.63	34.19	0.51	3.22	27.10	103.8	1.099
					700	4.19	34.25	0.44	3.29	27.19	95.1	1.199
					800	3.88	34.30	0.40	3.32	27.26	88.8	1.291
					1000	3.50	34.39	0.52	3.28	27.37	79.5	1.459

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	
HORIZON; November 11, 1949; 1412 GCT; 37°21'N, 130°36'W; sounding, 2,850 fm; wind, 200°, force 5; weather, cloudy; sea, very rough; wire angle, 43°.													509
0	15.58	32.39	5.69	0.41	0	15.58	32.39	5.69	0.41	23.85	405.9	0.000	
7	15.59	32.57	5.73	0.39	10	15.60	32.56	5.72	0.39	23.98	393.8	0.040	
18	15.62	32.54	5.73	0.41	20	15.62	32.54	5.74	0.42	23.97	395.8	0.080	
36	14.87	32.83	5.86	0.49	30	15.60	32.77	5.78	0.46	24.14	379.4	0.118	
58	11.50	32.84	6.14	0.59	50	12.35	32.84	6.08	0.55	24.87	310.7	0.187	
77	10.34	32.84	5.91	0.74	75	10.48	32.84	5.99	0.72	25.21	278.7	0.265	
117	8.84	33.04	4.76	1.50	100	9.44	32.89	5.08	1.22	25.42	258.8	0.328	
150	8.09	33.44	4.56	1.70	150	8.09	33.44	4.56	1.70	26.06	198.8	0.443	
214	7.54	33.91	3.43	2.12	200	7.63	33.86	3.71	2.02	26.45	161.9	0.533	
280	6.88	34.02	2.23	2.50	250	7.20	33.99	2.69	2.34	26.62	146.8	0.609	
417	5.25	34.00	1.51	2.87	300	6.62	34.02	2.07	2.58	26.72	137.8	0.681	
639	4.56	34.23	0.29	3.28	400	5.37	34.00	1.61	2.84	26.86	114.4	0.807	
960	3.68	34.42	0.43	3.10r	500	4.90	34.06	0.97	3.04	26.96	115.5	0.922	
					600	4.64	34.19	0.34	3.25	27.10	103.9	1.032	
					700	4.40	34.28	0.29	-	27.19	95.3	1.131	
					800	4.07	34.35	0.31	-	27.28	87.2	1.223	
					1000	(3.62)	(34.43)	(0.42)	-	(27.39)	(77.9)	(1.388)	
HORIZON; November 11, 1949; 2120 GCT; 37°11'N, 131°15'W; sounding, 2,500 fm; wind, 200°, force 7; weather, lightning visible, no thunder heard; sea, high; wire angle, 46°.													510
0	16.67	32.90	5.45	0.50	0	16.67	32.90	5.45	0.50	24.00	392.0	0.000	
7	16.71	32.92	5.58	0.53	10	16.72	32.93	5.58	0.53	24.01	391.3	0.039	
24	16.73	32.97	5.41	0.53	20	16.76	32.97	5.48	0.53	24.04	389.3	0.078	
45	-	32.92	5.45	0.49	30	16.79	32.97	5.43	0.51	24.03	390.2	0.117	
66	-	32.71	5.39	0.53	50	16.79	32.90	5.44	0.49	23.98	395.9	0.196	
87	14.92	32.88	5.70	0.56	75	15.75	32.76	5.43	0.54	24.10	384.3	0.293	
135	9.96	32.88	5.66	0.94	100	13.25	32.88	5.70	0.61	24.72	325.7	0.382	
184	8.17	33.60	4.12	1.37	150	9.28	32.96	5.61	1.11	25.50	252.1	0.526	
283	7.27	33.93	3.91	1.90	200	8.01	33.70	5.28	1.46	26.27	179.3	0.634	
381	6.06	33.98	1.78	2.82	250	7.59	33.88	4.63	1.72	26.48	160.5	0.720	
584	4.74	34.14	0.48	3.29	300	7.05	33.94	3.40	2.02	26.60	149.4	0.797	
902	3.69	34.37	0.37	3.39	400	5.88	33.99	1.56	2.94	26.79	131.5	0.937	
1332	2.91	34.51	0.76	3.16	500	5.15	34.06	0.70	3.20	26.94	118.5	1.062	
					600	4.68	34.16	0.48	3.30	27.07	106.6	1.175	
					700	4.33	34.25	0.41	3.36	27.18	96.7	1.277	
					800	3.99	34.33	0.47	3.38	27.28	87.8	1.369	
					1000	3.43	34.41	0.38	3.36	27.40	77.1	1.534	
HORIZON; November 14, 1949; 1552 GCT; 37°16'N, 123°10'W; sounding, 615 fm; wind, 020°, force 4; weather, cloudy; sea, very rough; wire angle, 8°.													601
0	13.94		5.66	0.60	0	13.94		5.66	0.60				
10	13.96		5.77	0.62	10	13.96		5.77	0.62				
24	13.78		5.66	0.69	20	13.90		5.72	0.66				
49	11.80		5.30	1.04	30	13.50		5.60	0.78				
78	9.49		3.61	1.60	50	11.70		5.09	1.06				
103	8.62		3.62	1.80	75	9.65		3.65	1.56				
157	8.06		2.28r	2.19	100	8.69		3.63	1.78				
211	7.44		2.32	2.26	150	8.13		2.92	2.17				
315	6.52		1.43	2.64	200	7.58		2.40	2.24				
423	5.90		0.83	2.95	250	7.03		1.98	2.37				
628	5.06		0.54	2.97	300	6.63		1.55	2.58				
937	3.87		0.58	2.99	400	6.02		0.91	2.92				
1105	3.47		0.72	3.03	500	5.57		0.65	2.96				
					600	5.17		0.55	2.97				
					700	4.77		0.54	2.98				
					800	4.37		0.54	2.98				
					1000	3.71		0.60	3.00				

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4911

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

602 HORIZON; November 14, 1949; 0944 GCT; 37°01'N, 124°01'W; sounding, missing; wind, 360°, force 4; weather, partly cloudy; sea, rough; wire angle, 18°.

0	13.35	33.22	5.83	0.73	0	13.35	33.22	5.83	0.73	24.96	300.3	0.000
9	13.36	33.23	6.01	0.75	10	13.36	33.23	6.03	0.75	24.97	299.9	0.030
23	13.23	33.23	6.13	0.68	20	13.28	33.23	6.12	0.69	24.99	298.7	0.060
47	9.78	33.49	4.29	1.68	30	11.55	33.24	5.65	0.80	25.33	266.6	0.088
76	8.95	33.66	3.29	1.98	50	9.69	33.51	4.15	1.75	25.86	215.8	0.136
99	8.58	33.78	2.76	2.11	75	8.98	33.65	3.30	1.98	26.09	195.1	0.188
152	7.62	33.93	2.75	2.21	100	8.55	33.79	2.76	2.12	26.26	178.6	0.234
203	7.02	33.96	2.31	2.32	150	7.65	33.93	2.77	2.21	26.51	156.1	0.318
302	5.95	34.04	1.53	2.75	200	7.05	33.96	2.35	2.31	26.62	146.4	0.394
404	5.48	34.12	0.76	2.86	250	6.48	34.00	1.94	2.55	26.72	136.5	0.464
602	4.96	34.33	0.28	3.22	300	5.97	34.04	1.57	2.74	26.82	127.7	0.531
901	3.88	34.40	0.53	3.19	400	5.50	34.11	0.80	2.86	26.93	118.0	0.654
1164	3.25	34.47	0.74	3.14	500	5.24	34.22	0.36	3.06	27.05	107.9	0.767
					600	4.97	34.33	0.28	3.21	27.17	97.5	0.869
					700	4.60	34.37	0.32	3.22	27.24	90.9	0.963
					800	4.24	34.39	0.44	3.20	27.30	87.3	1.052
					1000	3.59	34.43	0.60	3.17	27.40	77.4	1.217

603 HORIZON; November 14, 1949; 0404 GCT; 36°50'N, 124°43'W; sounding, 2,300 fm; wind, 360°, force 2; weather, partly cloudy; sea, rough; wire angle, 19°.

0	13.00	6.09	0.67	0	13.00	6.09	0.67	
9	13.02	6.18	0.70	10	13.02	6.18	0.69	
23	12.92	6.18	0.67	20	12.94	6.18	0.67	
46	10.51	5.09	1.19	30	12.58	5.95	0.70	
75	8.94	3.75	1.80	50	10.20	4.85	1.32	
99	8.76	2.89	1.95	75	8.94	3.75	1.80	
150	7.95	2.62	2.13	100	8.75	2.88	1.96	
203	7.43	2.13	2.26	150	7.95	2.62	2.13	
300	6.68	1.29	2.51	200	7.47	2.18	2.25	
402	5.96	0.76	2.73	250	7.04	1.66	2.39	
598	4.81	0.38	2.90	300	6.68	1.29	2.51	
891	3.82	0.55	2.94	400	5.99	0.78	2.71	
1246	3.10	0.89	2.83	500	5.34	0.48	2.83	
				600	4.80	0.38	2.90	
				700	4.40	0.40	2.93	
				800	4.07	0.45	2.94	
				1000	3.58	0.63	2.91	

604 HORIZON; November 13, 1949; 2227 GCT; 36°37'N, 125°31'W; sounding, missing; wind, 040°, force 3; weather, cloudy; sea, rough; wire angle, 15°.

0	14.25	32.99	5.81	0.51	0	14.25	32.99	5.81	0.51	24.60	334.6	0.000
9	14.02	32.95	5.84	0.52	10	13.98	32.95	5.84	0.52	24.63	332.5	0.033
23	13.24	33.15	5.84	0.74	20	13.45	33.14	5.85	0.70	24.88	308.6	0.065
48	10.82	33.04	5.50	1.09	30	12.75	33.13	5.78	0.85	25.02	296.2	0.096
76	9.43	33.17	5.70	1.39	50	10.64	33.04	5.50	1.12	25.34	265.9	0.152
100	9.17	-	4.88	1.65	75	9.48	33.17	5.70	1.38	25.53	238.3	0.215
152	8.23	33.84[a]	3.00	2.18	100	9.17	33.29	4.88	1.65	25.78	225.0	0.273
203	8.00	33.44[a]	2.08	2.44	150	8.27	33.51	3.06	2.16	26.09	196.1	0.378
301	6.74	34.11	1.30	2.82	200	8.01	33.75	2.12	2.42	26.31	175.4	0.471
406	5.90	34.15	0.74	2.95	250	7.36	33.99	1.68	2.68	26.60	149.0	0.552
605	4.96	34.42	0.32	3.24	300	6.77	34.11	1.32	2.82	26.77	133.1	0.622
906	3.92	34.42	0.41	3.22	400	5.93	34.15	0.75	2.94	26.91	120.5	0.749
1166	3.28	34.54	0.77	3.15	500	5.49	34.30	0.44	3.12	27.09	104.8	0.862
					600	4.99	34.42	0.34	3.24	27.24	91.0	0.960
					700	4.56	34.42	0.35	3.24	27.29	86.7	1.048
					800	4.22	34.42	0.36	3.24	27.32	84.0	1.134
					1000	3.68	34.45	0.50	3.20	27.40	77.0	1.295

a) Values rejected; samples appear to have been reversed.

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

HORIZON; November 13, 1949; 1648 GCT; 36°24'N, 126°17'W; sounding, 2,500 fm; wind, 040°, force 2 — 605
weather, cloudy; sea, rough; wire angle, 3°.

0	16.04	5.61	0.47	0	16.04	5.61	0.48
10	16.04	5.59	0.47	10	16.04	5.59	0.47
25	16.08	-	0.49	20	16.07	5.58	0.48
49	-	5.61	0.45	30	16.10	5.58	0.49
79	12.02	6.01	0.76	50	15.25	5.61	0.45
103	10.39	5.66	0.99	75	12.65	5.98	0.72
158	8.57	4.50	1.68	100	10.52	5.73	0.94
213	7.64	3.33	2.12	150	8.71	4.64	1.59
294	6.46	0.75	2.59	200	7.88	3.66	2.04
532	5.11	0.54	3.08	250	6.97	1.89	2.36
734	4.52	0.30	3.23	300	6.40	0.72	2.62
				400	5.72	0.63	2.88
				500	5.24	0.58	3.04
				600	4.89	0.45	3.14
				700	4.60	0.32	3.22

HORIZON; November 13, 1949; 1133 GCT; 36°12'N, 126°58'W; sounding, 2,600 fm; wind, 090°, force 2; — 606
weather, cloudy; sea, moderate; wire angle, 22°.

0	16.31	32.90	5.66	0.54	0	16.31	32.90	5.66	0.54	24.09	384.1	0.000
9	16.32	32.92	5.66	0.53	10	16.32	32.92	5.66	0.53	24.10	383.1	0.038
22	16.36	32.92	5.72	0.53	20	16.36	32.92	5.71	0.52	24.09	384.4	0.077
46	13.80	32.95	5.84	0.79	30	16.36	32.92	5.76	0.60	24.08	385.1	0.115
73	10.62	32.90	5.95	0.89	50	12.95	32.95	5.85	0.80	24.84	313.6	0.185
96	9.90	33.06	5.62	1.16	75	10.55	32.90	5.95	0.90	25.24	275.5	0.259
144	9.04	33.40	4.60	1.71	100	9.81	33.08	5.52	1.20	25.51	250.6	0.324
192	7.85	33.77	3.38	2.06	150	8.90	33.45	4.45	1.76	25.94	210.0	0.440
282	7.04	34.02	2.36	2.49	200	7.74	33.81	3.28	2.10	26.40	167.2	0.534
376	5.92	34.07	1.43	2.76	250	7.31	33.97	2.72	2.36	26.59	149.9	0.613
558	4.99	34.18	0.49	3.13	300	6.86	34.04	2.17	2.54	26.70	139.7	0.686
842	3.90	34.38	0.31	3.20	400	5.76	34.08	1.25	2.82	26.88	123.4	0.816
1095	3.36	34.45	0.83	3.26	500	5.25	34.13	0.66	3.04	26.98	114.6	0.936
					600	4.77	34.22	0.41	3.16	27.11	103.2	1.045
					700	4.34	34.30	0.35	3.19	27.22	93.1	1.143
					800	4.02	34.36	0.33	3.20	27.30	85.9	1.233
					1000	3.54	34.43	0.58	3.23	27.40	77.0	1.396

HORIZON; November 13, 1949; 0505, 0555 GCT; 35°58'N, 127°51'W; sounding, 2,500 fm; wind, 140°, force 5; — 607
weather, partly cloudy; sea, rough; wire angle, 25°, 28°.

0	16.38	5.21	0.44	0	16.38	5.21	0.44
9	16.38	5.44	0.44	10	16.38	5.45	0.44
23	16.44	5.47	0.44	20	16.42	5.46	0.44
45	16.42	5.47	0.46	30	16.43	5.49	0.44
71	14.90	5.49	0.58	50	16.41	5.49	0.47
93	11.08	5.81	0.79	75	14.30	5.50	0.62
141	8.96	4.87	1.57	100	10.67	5.75	0.89
189	7.98	3.87	1.94	150	8.71	4.68	1.66
281	7.14	2.04	2.59	200	7.84	3.55	2.02
378	5.95	1.56	2.86	250	7.41	2.48	2.41
565	4.96	0.50	3.15	300	6.92	1.91	2.66
				400	5.77	1.40	2.90
905	3.86	0.34	3.35	500	5.28	0.73	3.05
1137	3.32	0.66	3.21	600	4.84	0.44	3.19
				700	4.48	0.35	3.29
				800	4.16	0.35	3.34
				1000	3.61	0.40	3.32

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4911

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

608 HORIZON; November 12, 1949; 2345 GCT; 35°44'N, 128°32'W; sounding, missing; wind, 160°, force 5; weather, overcast; sea, high; wire angle, 30°.

0	16.90	33.03	5.45	0.32	0	16.90	33.03	5.45	0.32	24.05	387.3	0.000
9	16.89	33.17	5.55	0.34	10	16.88	33.17	5.54	0.34	24.16	377.3	0.038
21	16.95	33.04	5.41	0.34	20	16.94	33.04	5.40	0.34	24.05	388.5	0.077
43	16.44	33.07	5.54	0.36	30	16.94	33.04	5.41	0.34	24.05	388.8	0.115
69	13.19	33.08	6.28	0.36	50	15.90	33.08	5.65	0.36	24.32	363.6	0.191
90	11.77	33.06	5.91	0.42	75	12.65	33.08	6.20	0.37	25.00	299.0	0.270
138	9.86	33.22	5.20	0.94	100	11.35	33.07	5.75	0.51	25.23	276.9	0.345
186	8.40	33.61	4.45	1.59	150	9.47	33.30	5.00	1.11	25.73	229.9	0.472
279	8.20	33.87	2.66	2.18	200	8.19	33.68	4.17	1.72	26.23	183.2	0.576
376	6.34	33.81	1.67	2.60	250	7.54	33.83	3.18	2.03	26.44	163.6	0.662
564	4.98	34.16	0.58	3.01	300	7.03	33.87	2.40	2.28	26.55	154.4	0.741
850	3.99	34.38	0.37	3.17	400	6.15	33.84	1.49	2.68	26.64	146.2	0.892
1204	3.20	34.54	0.68	3.19	500	5.39	34.05	0.83	2.93	26.90	122.2	1.026
					600	4.79	34.19	0.50	3.04	27.08	105.6	1.140
					700	4.41	34.28	0.40	3.11	27.19	95.5	1.241
					800	4.11	34.35	0.37	3.16	27.28	87.7	1.332
					1000	3.64	34.46	0.44	3.18	27.41	76.9	1.496

609 HORIZON; November 12, 1949; 1749 GCT; 35°31'N, 129°23'W; sounding, 2,500 fm; wind, 140°, force 5; weather, cloudy; sea, rough; wire angle, 44°.

0	17.20	33.19	5.41	0.41	0	17.20	33.19	5.41	0.41	24.10	382.7	0.000
8	17.21	33.04	5.44	0.45	10	17.22	33.04	5.45	0.45	23.98	394.3	0.039
27	17.25	32.95	5.47	0.46	20	17.25	32.98	5.46	0.46	23.93	399.7	0.079
49	-	32.96	5.36	0.45	30	17.25	32.95	5.46	0.46	23.91	402.1	0.119
71	-	32.94	5.30	0.48	50	17.25	32.96	5.35	0.45	23.91	401.9	0.199
94	17.20	33.08	5.33	0.47	75	17.25	32.94	5.30	0.48	23.90	404.2	0.300
142	11.42	32.86	5.71	0.72	100	17.10	33.07	5.36	0.47	24.03	392.0	0.399
192	9.30	33.31	4.90	1.36	150	11.00	32.90	5.69	0.79	25.16	284.4	0.569
291	7.06	33.68	3.15	2.77	200	9.05	33.35	4.76	1.46	25.84	220.4	0.695
390	5.81	33.98	1.87	2.82	250	7.79	33.54	3.84	1.95	26.18	188.7	0.797
600	4.82	34.22	0.48	3.33	300	6.97	33.70	3.03	2.34	26.42	166.2	0.885
929	3.78	34.42	0.48	3.44	400	5.73	34.00	1.77	2.86	26.82	129.1	1.033
1365	2.86	34.57	0.96	3.31	500	5.20	34.12	0.81	3.16	26.98	114.7	1.155
					600	4.82	34.22	0.48	3.33	27.10	103.9	1.264
					700	4.48	34.29	0.48	3.41	27.19	95.4	1.364
					800	4.15	34.36	0.48	3.44	27.28	87.4	1.455
					1000	3.54	34.45	0.50	3.43	27.42	75.4	1.618

610 HORIZON; November 12, 1949; 1111 GCT; 35°18'N, 130°11'W; sounding, 2,500 fm; wind, 180°, force 7; weather, cloudy; sea, high; wire angle, 55°.

0	17.62	33.17	5.44	0.39	0	17.62	33.17	5.44	0.39	23.98	393.7	0.000
28	-	33.28	5.42	0.41	10	17.58	33.22	5.43	0.40	24.03	389.5	0.039
41	-	33.22	5.33	0.43	20	17.52	33.27	5.42	0.40	24.08	384.8	0.078
55	17.34	33.46	5.58	0.35	30	17.47	33.27	5.40	0.42	24.10	383.9	0.116
81	13.68	33.40	6.11	0.41	50	17.37	33.40	5.45	0.35	24.22	372.7	0.192
108	13.05	33.42	5.61	0.48	75	14.25	33.41	6.01	0.40	24.93	305.9	0.277
157	13.06r	33.37	5.71	0.53	100	13.23	33.41	5.64	0.46	25.14	286.4	0.351
208	8.55	33.72	4.60	1.64	150	11.08	33.37	5.72	0.52	25.51	251.2	0.485
306	7.18	33.98	3.48	2.09	200	8.74	33.67	4.74	1.55	26.14	192.2	0.597
453	5.41	34.02	1.57	2.90	250	7.90	33.89	4.04	1.88	26.44	164.1	0.685
701	4.32	34.16	0.44	3.35	300	7.25	33.98	3.54	2.06	26.60	149.0	0.763
					400	6.00	34.01	2.30	2.68	26.79	131.6	0.904
					500	5.02	34.04	1.14	3.03	26.94	118.5	1.029
					600	4.57	34.11	0.65	3.24	27.04	109.0	1.142
					700	4.34	34.16	0.44	3.35	27.10	103.6	1.249

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m.

HORIZON; November 16, 1949; 0404 GCT; 36°35'N, 122°15'W; sounding, 1,300 fm; wind, 020°, force 2; weather, cloudy; sea, moderate; wire angle, 3°. 661

0	13.38	33.46	6.19	0.68	0	13.38	33.46	6.19	0.68	25.14	283.4	0.000
10	12.80	33.49	5.85	0.85	10	12.80	33.49	5.85	0.85	25.28	270.2	0.028
25	12.35	33.51	5.29	1.16	20	12.52	33.51	5.46	1.06	25.35	263.8	0.054
50	10.87	33.58	3.38r	1.57	30	12.00	33.52	5.12	1.25	25.46	253.9	0.080
80	10.38	33.62	3.63	1.73	50	10.87	33.58	4.20	1.57	25.71	230.2	0.129
105	10.13	33.69	3.44	1.75	75	10.45	33.61	3.70	1.71	25.81	221.5	0.185
160	9.34	33.82	-	2.13	100	10.19	33.67	3.47	1.74	25.90	213.0	0.240
214	8.66	34.04	1.75	2.40	150	9.50	33.79	2.91	2.02	26.11	194.0	0.341
318	7.72	34.14	1.16	2.66	200	8.80	34.01	2.00	2.35	26.40	167.7	0.432
425	6.78	34.16	0.87	2.84	250	8.29	34.09	1.42	2.49	26.54	155.1	0.512
631	5.00	34.27	0.47	3.07	300	7.86	34.13	1.19	2.61	26.63	146.7	0.587
940	4.00	34.39	0.46	3.04	400	7.03	34.16	0.96	2.80	26.77	134.3	0.728
1205	3.27	34.48	0.86	3.06	500	6.03	34.18	0.64	2.95	26.92	120.6	0.856
					600	5.19	34.26	0.48	3.06	27.09	105.3	0.969
					700	4.74	34.30	0.46	3.07	27.17	97.9	1.070
					800	4.45	34.34	0.46	3.05	27.24	92.4	1.165
					1000	3.81	34.41	0.50	3.05	27.36	81.6	1.339

HORIZON; November 16, 1949; 1147 GCT; 35°41'N, 121°50'W; sounding, 650 fm; wind, calm; weather, cloudy; sea, moderate; wire angle, 8°. 701

0	14.93		5.64	0.45	0	14.93	5.64	0.45
10	14.78		5.52	0.46	10	14.78	5.52	0.46
24	13.99		5.85	0.56	20	14.33	5.71	0.52
49	10.67		4.60	1.48	30	12.50	5.80	0.85
79	9.56		3.70	1.77	50	10.62	4.58	1.50
103	9.42		2.23	2.06	75	9.61	3.79	1.74
157	8.97		1.16	2.28	100	9.44	2.51	2.01
211	8.33		1.10	2.37	150	9.04	1.20	2.27
311	7.66		0.67	2.75	200	8.46	1.10	2.34
417	6.90		0.37	2.94	250	8.06	1.00	2.48
619	5.50		0.42	3.15	300	7.73	0.75	2.70
825	4.42		0.57	3.26	400	7.04	0.39	2.92
978	3.94		-	3.22	500	6.25	0.39	3.03
					600	5.62	0.40	3.14
					700	5.04	0.48	3.22
					800	4.53	0.55	3.26
					1000	(3.92)	-	(3.22)

HORIZON; November 16, 1949; 1711 GCT; 35°25'N, 122°35'W; sounding, 2,200 fm; wind, calm; weather, fog; sea, moderate; wire angle, 6°. 702

0	14.58	33.12	5.86	0.50	0	14.58	33.12	5.86	0.50	24.63	331.8	0.000
10	14.40	33.12	5.95	0.53	10	14.40	33.12	5.95	0.53	24.67	328.4	0.033
24	13.25	33.06	5.87	0.57	20	13.48	33.08	5.90	0.55	24.83	313.5	0.065
49	12.60	33.06	5.75	0.86	30	13.10	33.05	5.84	0.61	24.88	308.6	0.096
79	9.52	33.21	5.18	1.28	50	12.55	33.06	5.74	0.87	25.00	298.1	0.157
103	8.92	33.53	4.17	1.67	75	9.74	33.17	5.30	1.24	25.59	242.4	0.224
158	8.73	33.96	2.24	2.17	100	8.95	33.46	4.29	1.62	25.94	209.2	0.281
211	8.08	34.07	1.86	2.38	150	8.82	33.93	2.40	2.10	26.33	173.2	0.377
314	6.76	34.07	1.50	2.58	200	8.24	34.06	1.92	2.35	26.52	155.8	0.458
420	6.22	33.66r	0.76	2.89	250	7.51	34.08	1.71	2.48	26.65	144.5	0.534
625	5.00	34.29	0.50	3.07	300	6.91	34.07	1.55	2.56	26.72	137.9	0.604
930	3.93	34.58r	0.55	3.04	400	6.32	34.11	0.91	2.82	26.83	128.5	0.737
1195	3.36	34.48	0.81	2.99	500	5.73	34.20	0.60	3.01	26.97	115.5	0.859
					600	5.14	34.28	0.52	3.06	27.11	103.2	0.969
					700	4.64	34.33	0.51	3.06	27.21	94.4	1.067
					800	4.28	34.37	0.54	3.05	27.28	87.9	1.159
					1000	4.02	34.43	0.61	3.02	27.35	82.5	1.329

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

703 HORIZON; November 16, 1949; 2241 GCT; 35°09'N, 123°25'W; sounding, 2,200 fm; wind, 270°, force 1; weather, cloudy; sea, slight; wire angle, 0°.

0	14.45		5.91	0.59	0	14.45	5.91	0.59
10	13.76		5.95	0.68	10	13.76	5.95	0.68
25	13.02		5.85	0.83	20	13.25	5.90	0.77
50	11.91		4.63	1.26	30	12.84	5.75	0.88
80	9.30		3.24	1.97	50	11.91	4.63	1.26
105	8.93		2.62	2.12	75	9.43	3.41	1.91
160	8.45		2.14	2.32	100	8.99	2.72	2.10
215	7.76		2.05	2.41	150	8.55	2.17	2.29
318	6.82		1.29	2.77	200	7.94	2.10	2.38
425	6.04		0.80	3.03	250	7.39	1.85	2.51
631	4.94		0.33	3.23	300	6.97	1.42	2.69
940	3.97		0.57	3.30	400	6.22	0.90	2.99
1205	3.28		1.07	3.19	500	5.57	0.55	3.12
					600	5.07	0.35	3.21
					700	4.70	0.35	3.26
					800	4.38	0.43	3.29
					1000	3.80	0.66	3.29

704 HORIZON; November 17, 1949; 0350 GCT; 34°54'N, 124°04'W; sounding, 2,400 fm; wind, calm; weather, partly cloudy; sea, slight; wire angle, 22°.

0	15.88	32.95	-	0.46	0	15.88	32.95	(5.94)	0.46	24.22	371.2	0.000
8	15.45	32.97	-	0.47	10	15.35	32.98	(5.94)	0.48	24.36	358.1	0.037
22	14.71	33.18	5.94	0.53	20	14.85	33.18	5.94	0.52	24.62	333.3	0.071
45	10.95	32.90	5.73	0.82	30	13.90	33.14	5.89	0.62	24.79	317.5	0.103
72	9.66	32.95	5.65	1.13	50	10.40	32.90	5.70	0.90	25.27	272.5	0.163
95	9.80	33.24	5.12	1.33	75	9.80	32.96	5.64	1.16	25.42	258.9	0.229
143	8.36	33.68	3.38	2.02	100	9.65	33.31	4.87	1.39	25.71	231.1	0.290
191	7.96	33.96	-	2.26	150	8.30	33.75	3.27	2.06	26.27	178.7	0.393
280	6.85	34.02	2.01	2.50	200	7.87	33.98	2.67	2.29	26.52	156.2	0.476
376	6.02	34.05	1.20	2.79	250	7.24	34.01	2.25	2.43	26.63	145.9	0.552
560	4.98	34.18	0.52	3.05	300	6.64	34.03	1.85	2.56	26.73	137.2	0.623
845	4.01	34.43	0.45	3.15	400	5.88	34.06	1.03	2.85	26.85	126.3	0.754
1103	3.48	34.45	0.77	3.10	500	5.32	34.12	0.63	3.00	26.96	116.3	0.876
					600	4.79	34.22	0.50	3.08	27.10	103.4	0.985
					700	4.40	34.33	0.45	3.14	27.23	91.6	1.083
					800	4.12	34.41	0.45	3.15	27.33	83.4	1.170
					1000	3.68	34.45	0.60	3.13	27.40	77.0	1.330

705 HORIZON; November 17, 1949; 0933 GCT; 34°33'N, 124°51'W; sounding, 2,200 fm; wind, 270°, force 1; weather, fog; sea, missing; wire angle, 0°.

0	16.50		5.99	0.47	0	16.50	5.99	0.47
10	16.50		5.58	0.48	10	16.50	5.58	0.48
25	16.50		5.55	0.48	20	16.50	5.55	0.48
50	16.50		5.43	0.50	30	16.50	5.50	0.49
80	13.63		5.88	0.62	50	16.50	5.43	0.50
105	11.65		5.70	0.69	75	14.25	5.84	0.59
160	8.97		4.55	1.63	100	12.02	5.75	0.68
215	8.12		3.59	2.01	150	9.20	4.75	1.50
317	7.10		1.99	2.59	200	8.32	3.82	1.92
425	6.13		1.14	3.02	250	7.73	2.95	2.20
631	4.80		0.40	3.27	300	7.25	2.22	2.48
939	3.87		0.59	3.30	400	6.34	1.33	2.97
1204	3.28		0.85	3.22	500	5.57	0.74	3.14
					600	4.94	0.43	3.25
					700	4.56	0.41	3.29
					800	4.25	0.47	3.30
					1000	3.73	0.63	3.29

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	
HORIZON; November 17, 1949; 1523 GCT; 34°13'N, 125°40'W; sounding, 2,700 fm; wind, 220°, force 2; weather, cloudy; sea, rough; wire angle, 9°.													706
0	17.02	33.26	5.52	0.48	0	17.02	33.26	5.52	0.48	24.20	373.5	0.000	
10	17.04	33.25	5.40	0.48	10	17.04	33.25	5.40	0.48	24.18	375.2	0.037	
25	17.08	33.26	5.55	0.51	20	17.07	33.25	5.50	0.50	24.18	376.0	0.075	
49	17.09	33.25	5.42	0.51	30	17.10	33.26	5.55	0.50	24.18	376.2	0.113	
79	13.28	33.01	6.24	0.55	50	17.09	33.25	5.42	0.51	24.17	377.5	0.188	
103	11.48	33.03	5.90	0.70	75	13.82	33.02	6.21	0.54	24.72	325.8	0.276	
157	9.42	33.36	5.02	1.57	100	11.65	33.02	6.00	0.68	25.14	285.9	0.352	
210	8.26	33.78	3.86	2.00	150	9.63	33.28	5.18	1.47	25.69	233.9	0.482	
312	7.01	34.00	2.51	2.50	200	8.41	33.74	4.05	1.94	26.24	182.0	0.587	
418	6.00	34.05	1.27	2.97	250	7.73	33.91	3.28	2.21	26.48	160.4	0.672	
621	4.74	34.23	0.50	3.37	300	7.16	33.99	2.69	2.45	26.62	147.1	0.748	
926	3.98	34.43	-	3.38	400	6.16	34.04	1.44	2.89	26.80	131.5	0.888	
1192	3.36	34.49	0.95	3.35	500	5.34	34.12	0.74	3.21	26.96	116.5	1.012	
					600	4.80	34.21	0.50	3.36	27.09	104.3	1.122	
					700	4.52	34.29	0.50	3.38	27.19	95.9	1.222	
					800	4.28	34.36	0.56	3.38	27.27	88.9	1.315	
					1000	3.78	34.46	0.74	3.38	27.40	77.5	1.481	
HORIZON; November 17, 1949; 2009 GCT; 34°10'N, 126°21'W; sounding, 2,400 fm; wind, 140°, force 1; weather, cloudy; sea, moderate; wire angle, 11°.													707
0	16.93		5.52	0.46	0	16.93		5.52	0.46				
10	16.79		5.47	0.47	10	16.79		5.47	0.47				
25	16.73		5.45	0.46	20	16.76		5.45	0.47				
49	16.29		5.52	0.47	30	16.70		5.45	0.46				
78	13.13		5.85	0.75	50	16.25		5.54	0.48				
103	10.71		5.57	0.82	75	14.00		5.84	0.73				
156	9.25		3.98	1.79	100	10.90		5.63	0.81				
209	8.19		3.14	2.23	150	9.39		4.14	1.70				
310	6.94		1.86	2.61	200	8.35		3.28	2.17				
417	6.14		1.14	2.92	250	7.60		2.55	2.40				
621	4.56		0.48	3.22	300	7.05		1.97	2.57				
927	3.76		0.47	3.30	400	6.27		1.26	2.88				
1192	3.22		0.84	3.20	500	5.43		0.74	3.07				
					600	4.65		0.48	3.20				
					700	4.32		0.48	3.27				
					800	4.06		0.48	3.30				
					1000	3.60		0.53	3.29				
HORIZON; November 18, 1949; 0725 GCT; 33°34'N, 127°45'W; sounding, 2,500 fm; wind, 220°, force 3; weather, cloudy; sea, indeterminate; wire angle, 14°.													709
0	17.10		5.42	0.37	0	17.10		5.42	0.37				
9	17.12		5.45	0.38	10	17.12		5.46	0.38				
23	17.16		5.60	0.38	20	17.15		5.58	0.38				
48	-		5.42	0.40	30	17.16		5.57	0.38				
77	13.53		6.07	0.44	50	17.16		5.44	0.40				
101	12.30		5.63	0.52	75	13.68		6.08	0.43				
154	9.94		4.82	1.17	100	12.35		5.67	0.51				
207	8.32		4.05	1.75	150	10.12		4.88	1.11				
308	7.10		2.04	2.48	200	8.49		4.17	1.69				
413	6.00		1.10	2.82	250	7.75		3.04	2.10				
615	4.67		0.50	3.02	300	7.20		2.15	2.44				
916	3.80		0.45	3.04	400	6.12		1.15	2.80				
1178	3.24		0.87	2.98	500	5.26		0.77	2.94				
					600	4.73		0.52	3.01				
					700	4.37		0.48	3.03				
					800	4.08		0.45	3.04				
					1000	3.60		0.52	3.04				

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

710 HORIZON; November 18, 1949; 1312 GCT; 33°21'N, 128°16'W; sounding, 2,600 fm; wind, 140°, force 4; weather, cloudy; sea, moderate; wire angle, 17°.

0	17.61	33.39	5.46	0.48	0	17.61	33.39	5.46	0.48	24.16	377.2	0.000
9	17.62	33.39	5.50	0.47	10	17.62	33.39	5.50	0.47	24.15	377.9	0.038
23	17.67	33.43	5.45	0.47	20	17.65	33.42	5.46	0.46	24.17	376.8	0.076
47	-	33.54	5.43	0.47	30	17.66	33.46	5.45	0.46	24.20	374.3	0.113
76	13.78	33.22	5.82	0.47	50	17.65	33.54	5.43	0.47	24.26	368.9	0.187
99	13.16	33.35	5.67	0.46	75	13.82	33.22	5.80	0.47	24.87	311.2	0.272
152	10.86	33.35	5.33	1.05	100	13.11	33.35	5.66	0.46	25.11	288.5	0.347
205	8.93	33.68	4.40	1.74	150	10.96	33.35	5.38	1.02	25.52	250.6	0.482
305	7.52	34.00	2.34	2.56	200	9.12	33.65	4.50	1.67	26.06	199.4	0.595
410	6.41	34.09	1.45	2.92	250	8.17	33.89	3.34	2.17	26.40	168.1	0.687
609	4.92	34.16	1.34	3.31	300	7.58	33.99	2.44	2.53	26.56	153.0	0.767
910	3.82	34.34	0.45	3.43	400	6.51	34.09	1.51	2.89	26.79	132.3	0.909
1173	3.30	34.47	0.85	3.33	500	5.68	34.13	0.86	3.12	26.93	120.0	1.036
					600	4.98	34.16	0.50	3.30	27.04	110.1	1.151
					700	4.45	34.20	0.45	3.40	27.13	101.8	1.257
					800	4.10	34.27	0.45	3.42	27.22	93.4	1.354
					1000	3.63	34.40	0.55	3.42	27.38	80.2	1.528

801 HORIZON; November 21, 1949; 0509 GCT; 33°50'N, 120°40'W; sounding, 1,100 fm; wind, 350°, force 6; weather, clear; sea, rough; wire angle, 24°.

0	14.74	33.46	5.91	0.38	0	14.74	33.46	5.91	0.38	24.86	310.2	0.000
8	14.76	33.45	6.10	0.39	10	14.75	33.45	6.10	0.38	24.85	311.3	0.031
22	14.50	33.44	5.94	0.36	20	14.70	33.44	5.99	0.36	24.85	311.3	0.062
45	12.10	33.45	4.99	1.06	30	13.55	33.44	5.74	0.44	25.09	288.8	0.092
72	9.70	33.58	3.77	1.75	50	11.55	33.46	4.60	1.30	25.50	250.4	0.146
95	9.16	33.71	3.41	1.83	75	9.60	33.59	3.73	1.77	25.94	209.2	0.203
146	8.48	33.96	2.63	2.23	100	9.07	33.74	3.34	1.87	26.14	190.2	0.253
196	7.87	34.09	2.02	2.46	150	8.43	33.97	2.58	2.25	26.42	164.4	0.342
292	6.64	34.11	1.47	2.72	200	7.82	34.09	2.00	2.47	26.61	147.4	0.421
394	6.18	34.21	0.69	3.09	250	7.16	34.10	1.67	2.61	26.71	138.3	0.491
587	5.38	34.34	0.35	3.24	300	6.58	34.11	1.41	2.75	26.80	130.4	0.558
881	4.23	34.45	0.49	3.29	400	6.15	34.22	0.65	3.10	26.94	117.9	0.682
1237	3.18	34.54	1.01	3.21	500	5.72	34.29	0.38	3.21	27.05	108.7	0.797
					600	5.33	34.35	0.35	3.24	27.14	100.4	0.901
					700	4.90	34.40	0.35	3.27	27.23	92.4	0.997
					800	4.52	34.44	0.41	3.28	27.31	85.7	1.086
					1000	3.86	34.48	0.64	3.28	27.41	76.9	1.249

802 HORIZON; November 20, 1949; 2300, 2323 GCT; 33°32'N, 121°22'W; sounding, 2,000 fm; wind, 340°, force 5; weather, overcast; sea, rough; wire angle, 20°, 25°.

0	15.53	5.48	0.40	0	15.53	5.48	0.40	
9	15.55	5.51	0.40	10	15.55	5.53	0.40	
23	15.56	5.55	0.39	20	15.55	5.55	0.39	
46	13.89	5.45	0.69	30	15.54	5.55	0.34	
74	10.86	4.25	1.38	50	13.03	5.37	0.78	
				75	10.80	4.25	1.40	
97	9.40	3.30	1.78	100	9.30	3.20	1.82	
148	8.71	2.36	2.25	150	8.68	2.34	2.26	
199	8.38	1.69	2.51	200	8.37	1.68	2.51	
298	7.80	1.03	2.74	250	8.15	1.26	2.64	
401	7.03	0.86	2.88	300	7.77	1.02	2.75	
599	5.48	0.38	3.16	400	7.04	0.87	2.88	
901	4.27	0.48	3.23	500	6.18	0.62	3.03	
1265	3.32	0.85	3.11	600	5.46	0.38	3.16	
				700	4.99	0.39	3.21	
				800	4.61	0.42	3.23	
				1000	3.96	0.55	3.22	

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

HORIZON; November 20, 1949; 1714 GCT; 33°15'N, 122°05'W; sounding, 2,500 fm; wind, 340°, force 5; weather, overcast; sea, rough; wire angle, 32°. 803

0	14.96	33.34	5.33	0.49	0	14.96	33.34	5.33	0.49	24.72	323.4	0.000
8	14.96	33.33	4.78r	0.50	10	14.95	33.33	5.30	0.51	24.72	324.2	0.032
21	14.16	33.46	5.17	0.59	20	14.23	33.46	5.17	0.58	24.96	300.8	0.064
42	12.89	33.46	4.58	0.98	30	13.69	33.46	4.90	0.75	25.08	289.9	0.093
67	10.48	33.46	3.76	1.61	50	12.30	33.46	4.35	1.18	25.36	264.0	0.149
88	9.26	33.60	3.24	1.79	75	9.80	33.49	3.50	1.68	25.83	219.8	0.209
134	8.43	33.87	2.89	2.14	100	8.96	33.68	3.15	1.89	26.11	192.9	0.261
179	7.96	34.02	2.12	2.38	150	8.27	33.93	2.65	2.24	26.42	164.9	0.350
263	7.14	34.09	1.27	2.81	200	7.79	34.05	1.86	2.49	26.58	149.8	0.429
351	5.80	34.05	1.21	2.87	250	7.31	34.09	1.35	2.75	26.68	141.0	0.501
524	5.15	34.24	0.40	3.31	300	6.52	34.07	1.23	2.86	26.77	132.6	0.569
797	4.24	34.43	0.40	3.27	400	5.54	34.09	1.04	2.98	26.91	120.0	0.696
1142	3.45	34.48	0.78	3.16	500	5.25	34.21	0.44	3.29	27.04	108.6	0.810
					600	4.87	34.32	0.40	3.30	27.17	96.9	0.914
					700	4.54	34.39	0.40	3.30	27.27	88.6	1.006
					800	4.24	34.43	0.40	3.27	27.33	83.3	1.092
					1000	3.75	34.46	0.57	3.22	27.40	77.2	1.252

HORIZON; November 20, 1949; 1127 GCT; 32°56'N, 122°48'W; sounding, 2,550 fm; wind, 340°, force 2; weather, fog; sea, moderate; wire angle, 16°. 804

0	15.32	33.37	5.87	0.56	0	15.32	33.37	5.87	0.56	24.67	328.7	0.000
9	15.20	33.40	5.90	0.56	10	15.18	33.40	5.91	0.56	24.72	323.9	0.033
23	14.41	33.43	6.15	0.63	20	14.75	33.43	6.14	0.61	24.84	313.0	0.064
47	13.27	33.87r	5.79	1.00	30	14.05	33.43	6.12	0.72	24.93	299.3	0.095
76	9.66	33.33	4.14	1.72	50	12.95	33.41	5.73	1.08	25.19	279.9	0.153
100	9.04	33.33	3.96	1.82	75	9.75	33.33	4.14	1.72	25.71	230.7	0.217
153	8.67	33.99	2.14	2.43	100	9.04	33.33	3.96	1.82	25.83	220.2	0.273
205	8.12	33.98	1.90	2.64	150	8.69	33.99	2.20	2.40	26.40	166.9	0.370
305	6.79	33.98	1.38	2.82	200	8.19	33.98	1.92	2.62	26.47	160.9	0.452
409	6.12	34.11	0.59	3.27	250	7.43	33.98	1.70	2.70	26.58	150.7	0.530
608	4.90	34.29	0.32	3.35	300	6.84	33.98	1.42	2.81	26.66	143.7	0.603
907	3.91	34.34u	0.63	3.31	400	6.18	34.10	0.62	3.24	26.84	127.3	0.739
1167	3.34	34.35	0.86	3.15	500	5.54	34.21	0.39	3.33	27.01	112.3	0.859
					600	4.95	34.28	0.32	3.35	27.13	100.9	0.965
					700	4.50	34.31	0.35	3.35	27.21	94.2	1.063
					800	4.16	34.33	0.48	3.35	27.26	89.7	1.155
					1000	3.69	34.35	0.71	3.26	27.32	84.5	1.329

HORIZON; November 20, 1949; 0608 GCT; 32°40'N, 123°30'W; sounding, 2,600 fm; wind, 350°, force 2; weather, fog; sea, moderate; wire angle, 5°. 805

0	16.78	33.20	5.63	0.42	0	16.78	33.20	5.63	0.42	24.21	372.5	0.000
10	16.42	33.12	5.53	0.45	10	16.42	33.12	5.53	0.45	24.27	366.4	0.037
25	16.42	33.15	5.44	0.41	20	16.40	33.16	5.47	0.42	24.26	367.8	0.074
50	-	33.13	5.57	0.42	30	16.41	33.14	5.46	0.41	24.25	369.7	0.111
79	12.72	33.08	5.71	0.66	50	15.90	33.13	5.57	0.42	24.36	359.8	0.183
104	11.05	-	5.53	0.75	75	13.00	33.08	5.71	0.63	24.93	305.7	0.267
158	9.66	33.50	4.71	1.64r	100	11.30	33.12	5.56	0.74	25.28	272.3	0.339
211	8.51	33.89	3.85	1.67	150	9.83	33.43	4.83	1.14	25.78	226.1	0.463
313	7.00	34.04	2.93	2.12	200	8.72	33.84	4.00	1.58	26.28	179.2	0.565
419	5.74	34.05	1.36	2.62	250	7.89	33.98	3.43	1.86	26.51	157.2	0.649
623	4.84	34.26	0.40	2.96	300	7.20	34.04	3.04	2.06	26.66	143.9	0.724
929	3.97	34.43	0.48	2.99	400	5.90	34.05	1.58	2.54	26.84	128.0	0.860
1192	3.31	34.49	0.86	2.97	500	5.29	34.12	0.79	2.84	26.97	115.8	0.982
					600	4.92	34.24	0.44	2.94	27.10	103.6	1.091
					700	4.60	34.31	0.40	2.97	27.20	95.4	1.191
					800	4.30	34.38	0.42	2.98	27.28	87.9	1.282
					1000	3.79	34.45	0.55	2.98	27.39	78.3	1.449

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

806 HORIZON; November 20, 1949; 0113 GCT; 32°22'N, 124°13'W; sounding, 2,600 fm; wind, 320°, force 2; weather, cloudy; sea, rough; wire angle, 5°.

0	17.67	33.40[a]	5.47	0.40	0	17.67	33.40	5.47	0.40	24.15	378.0	0.000
10	17.47	33.37	5.47	0.42	10	17.47	33.37	5.47	0.42	24.17	375.9	0.038
25	17.33	33.39	5.46	0.42	20	17.37	33.38	5.45	0.42	24.21	373.2	0.075
50	-	33.37	5.55	0.43	30	17.28	33.39	5.45	0.42	24.24	370.7	0.112
80	13.38	33.30	5.93	0.44	50	16.80	33.37	5.55	0.43	24.33	362.0	0.186
105	13.36	33.60	5.68	0.43	75	13.41	33.30	5.86	0.44	25.01	297.5	0.268
159	11.20	33.53	5.06	0.91	100	13.37	33.60	5.75	0.43	25.26	275.1	0.340
213	8.80	33.71	4.04	1.66	150	11.92	33.54	5.15	0.77	25.49	253.4	0.471
316	7.40	34.04	2.47	2.28	200	9.15	33.64	4.28	1.53	26.05	200.6	0.586
424	5.98	34.05	1.74	2.67	250	8.19	33.87	3.35	1.92	26.38	169.9	0.678
630	5.01	34.25	0.50	3.08	300	7.59	34.02	2.63	2.20	26.59	150.9	0.758
938	3.87	34.46	0.56	3.16	400	6.27	34.05	1.89	2.59	26.79	132.1	0.899
1203	3.32	34.40r	0.97	3.15	500	5.54	34.13	1.03	2.87	26.95	118.2	1.025
					600	5.13	34.23	0.52	3.05	27.07	106.8	1.137
					700	4.71	34.31	0.50	3.12	27.19	96.7	1.239
					800	4.27	34.38	0.51	3.14	27.29	87.2	1.331
					1000	3.73	(34.48)	0.62	3.16	(27.42)	(75.5)	(1.493)

807 HORIZON; November 19, 1949; 2047 GCT; 32°05'N, 124°55'W; sounding, 2,600 fm; wind, 140°, force 1; weather, fog; sea, rough; wire angle, 7°.

0	18.09	33.49	5.58	0.43	0	18.09	33.49	5.58	0.43	24.11	381.4	0.000
10	18.04	33.53	5.47	0.45	10	18.04	33.53	5.47	0.45	24.16	377.7	0.038
25	18.09	33.53	5.52	0.45	20	18.07	33.53	5.49	0.44	24.15	378.5	0.076
50	-	33.36	5.65	0.47	30	18.08	33.52	5.55	0.45	24.14	379.9	0.114
79	15.76	33.58	5.85	0.39	50	17.70	33.36	5.65	0.47	24.11	383.2	0.190
103	13.92	33.53	5.88	0.44	75	16.05	33.57	5.81	0.39	24.66	331.8	0.279
158	11.19	33.71	4.95	1.00	100	14.13	33.54	5.87	0.42	25.05	294.6	0.358
211	8.79	33.87	4.27	1.65	150	11.59	33.68	5.07	0.90	25.66	237.2	0.490
314	7.20	33.97	3.06	2.32	200	9.11	33.84	4.39	1.52	26.22	185.0	0.597
420	5.96	34.02	1.54	2.86	250	8.07	33.93	3.80	1.93	26.45	163.7	0.684
623	4.80	34.23	0.41	3.23	300	7.40	33.96	3.22	2.23	26.57	152.6	0.762
930	3.93	34.45	0.56	3.30	400	6.15	34.01	1.80	2.78	26.78	133.5	0.905
1197	3.28	34.49	0.81	3.21	500	5.38	34.09	0.84	3.07	26.93	119.2	1.032
					600	4.88	34.20	0.41	3.20	27.08	106.0	1.144
					700	4.54	34.31	0.41	3.26	27.20	94.7	1.245
					800	4.25	34.39	0.45	3.29	27.30	86.3	1.335
					1000	3.75	34.47	0.62	3.28	27.41	76.4	1.498

808 HORIZON; November 19, 1949; 1502 GCT; 31°47'N, 125°38'W; sounding, 2,450 fm; wind, 220°, force 2; weather, fog; sea, moderate; wire angle, 5°.

0	18.09	5.22	0.45	0	18.09	5.22	0.45	
10	18.12	5.23	0.45	10	18.12	5.23	0.45	
25	18.29	5.32	0.41	20	18.24	5.30	0.43	
50	18.26	5.37	0.34	30	18.30	5.35	0.39	
80	15.00	5.79	0.35	50	18.26	5.37	0.34	
105	14.56	5.58	0.36	75	15.20	5.76	0.35	
160	11.50	4.98	0.91	100	14.67	5.63	0.36	
214	9.40	4.60	1.26	150	12.10	5.07	0.80	
317	7.44	3.11	2.14	200	9.78	4.70	1.16	
425	6.04	1.71	2.72	250	8.67	4.10	1.58	
631	4.90	0.46	3.08	300	7.73	3.35	2.01	
940	3.83	0.59	3.21	400	6.26	2.00	2.63	
1205	3.26	0.87	3.18	500	5.56	1.00	2.90	
				600	5.05	0.50	3.05	
				700	4.61	0.47	3.14	
				800	4.23	0.50	3.18	
				1000	3.70	0.65	3.21	

a) Some of these salinity samples may have been contaminated.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	
HORIZON; November 19, 1949; 0926 GCT; 31°29'N, 126°20'W; sounding, 2,700 fm; wind, 180°, force 2; weather, fog in patches; sea, moderate, wire angle, 5°.													809
0	18.36	33.66	5.20	0.43	0	18.36	33.66	5.20	0.43	24.18	375.2	0.000	
10	18.36	33.68	5.20	0.39	10	18.36	33.68	5.20	0.39	24.20	373.9	0.037	
25	18.36	33.68	5.42	0.40	20	18.36	33.68	5.38	0.40	24.20	374.2	0.075	
50	18.38	33.64	5.28	0.40	30	18.36	33.68	5.39	0.40	24.20	374.5	0.112	
80	16.73	33.80	5.75	0.35	50	18.38	33.64	5.28	0.40	24.16	378.8	0.188	
104	15.26	33.93	5.60	0.36	75	17.35	33.76	5.74	0.36	24.50	346.7	0.278	
159	13.16	33.80	5.23	0.66	100	15.48	33.92	5.64	0.36	25.06	294.4	0.359	
213	9.78	33.68	4.69	1.35	150	13.72	33.83	5.29	0.57	25.36	266.4	0.498	
316	7.45	33.96	3.35	2.13	200	10.35	33.69	4.84	1.21	25.89	216.3	0.619	
423	6.04	34.00	1.96	2.74	250	8.68	33.78	4.20	1.63	26.24	183.8	0.720	
627	5.09	34.23	0.50	3.20	300	7.71	33.94	3.55	2.01	26.51	158.7	0.805	
934	4.18	34.45	0.54	3.29	400	6.27	33.99	2.29	2.64	26.74	136.6	0.953	
1199	3.55	34.51	0.82	3.20	500	5.58	34.07	1.06	2.99	26.89	123.2	1.083	
					600	5.19	34.20	0.52	3.16	27.04	109.7	1.199	
					700	4.85	34.31	0.50	3.24	27.17	98.5	1.302	
					800	4.55	34.39	0.50	3.28	27.27	89.8	1.396	
					1000	4.02	34.47	0.58	3.28	27.39	79.7	1.567	
HORIZON; November 19, 1949; 0338 GCT; 31°11'N, 127°03'W; sounding, 2,400 fm; wind, 160°, force 3; weather, cloudy; sea, moderate; wire angle, 11°.													810
0	18.57		5.21	0.45	0	18.57		5.21	0.45				
10	18.60		5.28	0.45	10	18.60		5.28	0.45				
25	18.65		5.19	0.45	20	18.64		5.23	0.45				
49	-		5.28	0.46	30	18.65		5.20	0.45				
78	14.77		5.85	0.44	50	18.64		5.30	0.46				
103	13.68		5.53	0.52	75	15.75		5.84	0.44				
157	10.88		4.85	1.09	100	13.83		5.57	0.50				
211	8.82		3.02	2.09	150	11.24		5.00	0.96				
313	7.52		1.35	2.72	200	9.15		3.37	1.98				
419	6.80		0.64	3.10	250	8.15		2.19	2.37				
622	5.80		0.33	3.21	300	7.63		1.48	2.67				
925	4.32		0.58	3.25	400	6.92		0.74	3.06				
1188	3.52		0.89	3.26	500	6.38		0.42	3.16				
					600	5.91		0.34	3.20				
					700	5.40		0.36	3.23				
					800	4.86		0.44	3.24				
					1000	4.06		0.65	3.25				
HORIZON; November 21, 1949; 1411 GCT; 33°00'N, 119°00'W; sounding, 1,060 fm; wind, 320°, force 5; weather, partly cloudy; sea, moderate; wire angle, 11°.													871
0	17.09	33.57	5.45	0.33	0	17.09	33.57	5.45	0.33	24.41	352.9	0.000	
10	17.10	33.57	5.39	0.34	10	17.10	33.57	5.39	0.34	24.41	353.2	0.035	
24	15.55	33.26	5.73	0.38	20	17.09	33.34	5.65	0.37	24.24	369.9	0.071	
48	11.24	33.04	5.04	0.92	30	13.50	33.18	5.70	0.43	24.91	306.8	0.105	
78	10.09	33.37	4.00	1.48	50	11.12	33.04	4.93	1.00	25.25	274.1	0.163	
104	9.22	33.71	3.23	1.79	75	10.18	33.33	4.09	1.44	25.64	237.6	0.227	
161	8.76	34.02	2.29	2.10	100	9.34	33.69	3.28	1.77	26.06	198.2	0.282	
216	8.08	34.07	-	2.31	150	8.86	34.00	2.36	2.07	26.38	168.7	0.374	
421	6.74	34.30	0.58	2.88	200	8.21	34.06	1.87	2.28	26.53	155.3	0.454	
626	5.58	34.36	0.35	2.94	250	7.82	34.10	1.51	2.44	26.62	147.3	0.530	
935	4.36	34.43	0.46	3.01	300	7.50	34.17	1.19	2.59	26.72	138.6	0.601	
1296	3.83	34.48	0.54	3.06	400	6.89	34.29	0.67	2.84	26.90	122.7	0.732	
					500	6.21	34.33	0.43	2.93	27.02	111.9	0.849	
					600	5.69	34.35	0.35	2.94	27.10	105.1	0.958	
					700	5.26	34.38	0.36	2.95	27.18	98.4	1.060	
					800	4.80	34.41	0.42	2.98	27.25	91.6	1.155	
					1000	4.24	34.45	0.48	3.02	27.35	83.7	1.330	

S10

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4911

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

901 CREST; November 19, 1949; 1421 GCT; 32°40'N, 118°11'W; sounding, 1,050 fm; wind, 270°, force 2; weather, fog; sea, moderate; wire angle, 1°.

0	17.4	33.54	5.18	0.48	0	17.4	33.54	5.18	0.48	24.33	360.9	0.000
10	17.33	33.53	5.06	0.44	10	17.33	33.53	5.06	0.44	24.33	361.1	0.036
24	16.76	33.55	5.18	0.50	20	16.95	33.54	5.10	0.48	24.43	352.2	0.072
49	13.95	33.40	5.56	0.65	30	16.73	33.54	5.30	0.52	24.48	347.5	0.107
78	10.87	33.28	4.36	1.22	50	13.77	33.40	5.55	0.66	25.02	296.5	0.171
102	9.82	33.55	3.66	1.56	75	11.04	33.29	4.45	1.05	25.46	255.1	0.240
155	8.96	33.95	2.58	1.88	100	9.88	33.44	3.70	1.53	25.78	225.0	0.300
209	8.15	34.07	2.22	2.07	150	9.01	33.94	2.63	1.86	26.31	175.3	0.400
311	7.50	34.26	1.09	2.46	200	8.26	34.05	2.27	2.05	26.51	156.7	0.483
419	6.62	34.25	0.56	2.73	250	7.82	34.15	1.83	2.20	26.65	144.0	0.559
624	5.34	34.41	0.32	2.87	300	7.56	34.24	1.19	2.41	26.76	134.3	0.628
830	4.43	34.48	0.42	2.98	400	6.78	34.25	0.62	2.70	26.88	124.1	0.757
1199	3.50	34.50	0.80	2.87	500	6.09	34.30	0.40	2.81	27.01	112.5	0.875
					600	5.48	34.40	0.34	2.86	27.16	98.8	0.981
					700	4.96	34.45	0.35	2.94	27.27	89.3	1.075
					800	4.54	34.48	0.40	2.98	27.34	83.1	1.161
					1000	3.93	34.50	0.57	2.95	27.42	76.3	1.321

902 CREST; November 19, 1949; 0917 GCT; 32°18'N, 118°50'W; sounding, 640 fm; wind, 270°, force 1; weather, fog; sea, moderate; wire angle, 5°.

0	16.5	33.46	5.46	0.53	0	16.5	33.46	5.46	0.53	24.47	347.4	0.000
10	15.90	33.50	5.64	0.47	10	15.90	33.50	5.64	0.47	24.64	331.7	0.034
25	13.86	33.41	5.54	0.60	20	14.42	33.44	5.58	0.50	24.92	305.6	0.066
50	11.96	33.40	5.06	1.01	30	13.35	33.40	5.50	0.72	25.10	287.8	0.096
80	10.11	33.61	3.74	1.51	50	11.96	33.40	5.06	1.01	25.38	262.1	0.150
104	9.27	33.73	3.19	1.90	75	10.35	33.58	3.91	1.41	25.80	222.0	0.211
159	8.90	34.00	2.36	2.11	100	9.35	33.71	3.28	1.86	26.07	196.9	0.263
212	7.98	34.05	2.02	2.28	150	8.97	33.98	2.47	2.09	26.35	171.7	0.355
314	7.44	34.20	1.02	2.74	200	8.12	34.04	2.07	2.24	26.52	155.5	0.437
421	6.75	34.29	0.58	–	250	7.73	34.10	1.72	2.47	26.63	146.3	0.513
626	5.50	34.35	0.37	3.07	300	7.53	34.18	1.12	2.70	26.72	138.3	0.584
831	4.48	34.43	0.51	3.16	400	6.89	34.27	0.63	2.88	26.88	124.2	0.715
1002	3.74	34.51	0.75	3.16	500	6.26	34.32	0.45	2.99	27.00	113.4	0.834
					600	5.65	34.35	0.38	3.06	27.10	104.7	0.943
					700	5.11	34.37	0.40	3.11	27.19	97.3	1.044
					800	4.61	34.42	0.49	3.15	27.28	88.5	1.136
					1000	3.75	34.51	0.75	3.16	27.44	73.5	1.299

903 CREST; November 19, 1949; 0345 GCT; 32°03'N, 119°32'W; sounding, 980 fm; wind, 320°, force 2; weather, cloudy; sea, none; wire angle, 4°.

0	18.0	33.50	5.26	0.43	0	18.0	33.50	5.26	0.43	24.14	378.5	0.000
10	17.92	33.54	5.19	0.40	10	17.92	33.54	5.19	0.40	24.20	373.9	0.038
25	17.82	33.54	5.22	0.41	20	17.85	33.54	5.20	0.41	24.21	372.7	0.075
50	15.21	33.39	5.70	0.40	30	17.80	33.53	5.31	0.40	24.22	372.5	0.112
79	12.61	33.37	5.28	0.66	50	15.21	33.39	5.70	0.40	24.71	326.3	0.182
104	11.22	33.42	4.73	1.00	75	12.95	33.37	5.36	0.50	25.16	283.5	0.258
157	8.94	33.75	3.08	1.64	100	11.47	33.41	4.82	0.98	25.47	254.0	0.326
211	8.06	33.95	2.53	1.87	150	9.25	33.72	3.97	1.60	26.10	195.4	0.438
313	6.94	34.16	1.37	2.36	200	8.20	33.92	2.85	1.83	26.42	165.5	0.528
420	6.12	34.20	0.82	2.62	250	7.58	34.05	1.95	2.03	26.61	147.7	0.606
626	5.44	34.38	0.40	2.80	300	7.05	34.14	1.48	2.28	26.76	134.6	0.677
831	4.36	34.44	0.51	2.79	400	6.25	34.19	0.88	2.58	26.90	121.5	0.805
1198	3.41	34.54	0.85	2.79	500	5.86	34.28	0.52	2.74	27.02	111.2	0.922
					600	5.56	34.37	0.40	2.80	27.13	102.0	1.028
					700	5.03	34.40	0.43	2.80	27.22	94.1	1.126
					800	4.48	34.43	0.49	2.79	27.31	86.0	1.216
					1000	3.83	34.49	0.67	2.79	27.42	75.9	1.378

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

CREST; November 18, 1949; 2301 GCT; 31°44'N, 120°13'W; sounding, 2,150 fm; wind, 315°, force 2; weather, low fog; sea, moderate; wire angle, 4°. 904

0	17.4	33.57E	5.47	0.40	0	17.4	33.57	5.47	0.40	24.34	360.2	0.000	
10	17.33	33.48	5.47	0.43	10	17.33	33.48	5.47	0.43	24.29	364.7	0.036	
25	17.21	33.48	5.84	0.43	20	17.24	33.48	5.75	0.43	24.31	363.2	0.073	
50	15.71	33.44	6.04	0.50	30	17.17	33.48	5.89	0.44	24.33	361.8	0.109	
79	10.88	33.33	4.83	1.17	50	15.71	33.44	6.04	0.50	24.63	333.2	0.178	
104	9.96	33.51	4.08	1.39	75	11.08	33.34	5.02	1.12	25.49	252.1	0.252	
157	8.89	-	2.99	1.84	100	10.05	33.48	4.20	1.36	25.78	225.0	0.311	
211	8.26	-	2.13	2.18	150	8.98	33.66	3.10	1.78	26.09	195.7	0.417	
313	6.88	34.05	1.49	2.46	200	8.40	33.82	2.29	2.12	26.31	175.8	0.509	
421	6.18	34.16	0.62	2.79	250	7.75	33.94	1.85	2.31	26.50	158.5	0.592	
626	5.30	34.27	0.35	3.02	300	7.01	34.03	1.57	2.43	26.67	142.3	0.668	
832	4.47	34.43	0.54	2.98	400	6.27	34.15	0.73	2.71	26.87	124.7	0.802	
1203	3.38	34.34r	1.21	2.96	500	5.88	34.20	0.43	2.96	26.96	117.2	0.923	
					600	5.44	34.25	0.35	3.02	27.05	109.5	1.036	
					700	4.98	34.33	0.37	3.01	27.17	98.5	1.140	
					800	4.59	34.41	0.49	2.98	27.28	88.8	1.234	
					1000	3.92	(34.49)	0.83	2.97	(27.41)	(77.0)	(1.399)	

CREST; November 18, 1949; 1803 GCT; 31°27'N, 120°49'W; sounding, 2,150 fm; wind, 320°, force 3; weather, partly cloudy; sea, rough; wire angle, 4°. 905

0	16.8	33.42E	5.40	0.41	0	16.8	33.42	5.40	0.41	24.38	356.5	0.000	
10	16.69	33.26	5.39	0.45	10	16.69	33.26	5.39	0.45	24.27	366.5	0.036	
25	16.76	33.35	5.40	0.46	20	16.74	33.33	5.40	0.46	24.31	363.0	0.073	
49	13.72	33.24	5.64	0.62	30	16.77	33.34	5.45	0.48	24.32	363.0	0.109	
78	12.03	33.26	5.25	0.84	50	13.65	33.24	5.64	0.63	24.92	305.9	0.176	
103	10.32	33.35	4.52	1.35	75	12.30	33.26	5.32	0.81	25.20	279.3	0.249	
155	8.80	33.84	2.64	1.91	100	10.44	33.33	4.67	1.31	25.59	242.4	0.314	
207	8.15	33.98	2.01	2.20	150	8.86	33.82	2.70	1.87	26.24	181.9	0.421	
307	7.20	34.09	0.89	2.70	200	8.24	33.97	2.12	2.17	26.45	162.4	0.506	
411	6.40	34.16	0.50	2.83	250	7.73	34.04	1.43	2.40	26.58	150.8	0.584	
611	5.76	34.25	0.35	2.86	300	7.27	34.08	0.95	2.68	26.68	141.9	0.658	
810	4.79	34.42	0.42	2.97	400	6.48	34.15	0.53	2.82	26.84	127.5	0.793	
1170	3.58	34.52	0.85	3.02	500	6.07	34.20	0.38	2.85	26.93	119.6	0.916	
					600	5.80	34.24	0.35	2.86	27.00	114.8	1.034	
					700	5.33	34.33	0.37	2.90	27.13	103.0	1.142	
					800	4.84	34.42	0.42	2.96	27.26	91.3	1.240	
					1000	4.10	34.49	0.62	3.02	27.39	79.1	1.410	

CREST; November 18, 1949; 1331 GCT; 31°07'N, 121°30'W; sounding, 2,200 fm; wind, calm; weather, clear; sea, moderate; wire angle, 0°. 906

0	17.1	33.37E	5.59	0.44	0	17.1	33.37	5.59	0.44	24.26	367.3	0.000	
10	16.94	33.30	5.50	0.41	10	16.94	33.30	5.50	0.41	24.24	369.2	0.037	
25	16.76	33.30	5.66	0.52	20	16.82	33.30	5.65	0.49	24.27	366.7	0.074	
50	15.53	33.30	5.18	0.58	30	16.52	33.30	5.51	0.53	24.34	360.3	0.110	
80	11.79	33.46	5.45	0.80	50	15.53	33.30	5.18	0.58	24.57	338.9	0.180	
105	10.60	33.42	4.82	1.15	75	12.26	33.46	5.44	0.74	25.37	264.0	0.255	
159	9.06	33.82	3.03	1.89	100	10.80	33.42	5.04	1.04	25.60	241.8	0.319	
212	8.38	34.07	2.82	2.16	150	9.20	33.74	3.18	1.78	26.12	193.1	0.428	
315	7.38	34.07	1.18	2.56	200	8.52	34.03	2.48	2.11	26.45	162.2	0.516	
423	6.48	34.09	0.78	2.78	250	7.98	34.08	1.85	2.32	26.57	151.2	0.594	
629	5.10	34.42	0.38	3.06	300	7.53	34.07	1.30	2.50	26.63	146.3	0.669	
835	4.48	34.49	0.56	3.06	400	6.66	34.08	0.82	2.74	26.76	135.2	0.810	
1203	3.38	34.63	0.94	3.01	500	5.88	34.26	0.62	2.92	27.01	112.8	0.934	
					600	5.24	34.40	0.40	3.04	27.19	95.8	1.038	
					700	4.87	34.44	0.42	3.06	27.27	89.1	1.130	
					800	4.58	34.48	0.53	3.06	27.33	83.6	1.217	
					1000	3.98	34.55	0.74	3.04	27.45	73.1	1.373	

E Evaporation of salinity samples occurred on Cruise 4911 on stations 904 through 1210. Estimated average corrections to values given here can be made by subtracting 0.052 ‰ from the value of S, 0.040 from σ_t and by adding 3.9 to 10^5 δ at all depths; to ΔD add 0.004 for each 100 meter depth increment.

SIO

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4911

OBSERVED					INTERPOLATED					COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m

907 CREST; November 19, 1949; 0732 GCT; 30°48'N, 122°15'W; sounding, 2,350 fm; wind, 360°, force 1; weather, partly cloudy; sea, missing; wire angle, 9°.

0	17.7	33.51E	5.41	0.38	0	17.7	33.51	5.41	0.38	24.22	371.4	0.000
10	17.66	33.42	5.37	0.43	10	17.66	33.42	5.37	0.43	24.17	376.5	0.037
25	17.60	33.46	5.56	0.44	20	17.62	33.45	5.50	0.44	24.20	373.8	0.075
49	16.82	33.37	5.42	0.44	30	17.58	33.45	5.55	0.43	24.21	373.3	0.112
79	12.30	33.28	5.63	0.68	50	16.75	33.36	5.42	0.44	24.33	361.8	0.186
103	11.00	33.51	4.88	1.08	75	12.50	33.28	5.62	0.65	25.18	281.7	0.266
158	9.08	33.87	3.23	-	100	11.10	33.47	5.02	1.04	25.59	243.4	0.332
211	8.16	33.91	2.69	2.08	150	9.22	33.86	3.39	1.55	26.21	184.5	0.439
312	6.88	34.07	1.37	2.62	200	8.33	33.90	2.82	1.97	26.38	168.9	0.527
419	6.14	34.16	0.71	2.86	250	7.58	33.97	2.12	2.37	26.55	153.7	0.607
622	5.28	34.36	0.40	3.02	300	7.00	34.05	1.50	2.58	26.69	140.6	0.682
827	4.44	34.38r	0.54	3.10	400	6.26	34.14	0.79	2.83	26.86	125.3	0.814
1196	3.35	34.31r	0.94	3.11	500	5.86	34.25	0.51	2.95	27.00	113.3	0.934
					600	5.40	34.34	0.41	3.01	27.13	102.2	1.042
					700	4.94	34.41	0.45	3.06	27.24	92.3	1.139
					800	4.55	(34.46)	0.52	3.10	(27.32)	(84.7)	(1.227)
					1000	3.87	(34.53)	0.70	3.10	(27.45)	(73.3)	(1.385)

908 CREST; November 18, 1949; 0216 GCT; 30°30'N, 122°56'W; sounding, 2,350 fm; wind, 040°, force 2; weather, fog; sea, moderate; wire angle, 7°.

0	18.1	33.42E	5.36	0.38	0	18.1	33.42	5.36	0.38	24.06	386.7	0.000
10	17.58	33.42	5.38	0.41	10	17.58	33.42	5.38	0.41	24.18	375.1	0.038
25	17.27	33.37	5.43	0.43	20	17.34	33.40	5.40	0.42	24.23	371.2	0.075
49	13.80	33.24	5.93	0.45	30	17.13	33.35	5.48	0.43	24.24	370.5	0.112
78	11.19	33.13	5.51	0.43	50	13.65	33.23	5.92	0.45	24.91	306.5	0.180
101	10.70	33.42	4.48	0.51	75	11.28	33.13	5.57	0.43	25.29	270.7	0.252
153	8.99	33.78	3.47	1.10	100	10.76	33.41	5.00	0.50	25.60	241.9	0.316
205	8.42	34.02	2.27	1.91	150	9.04	33.76	3.55	1.10	26.16	189.2	0.425
304	7.28	34.20	1.33	2.47	200	8.48	34.00	2.34	1.86	26.44	163.9	0.512
408	6.11	34.22	0.69	2.79	250	7.97	34.13	1.80	2.22	26.62	147.4	0.590
610	5.09	34.23	0.39	3.12	300	7.33	34.20	1.36	2.46	26.77	134.0	0.661
812	4.39	34.42	0.45	3.17	400	6.17	34.22	0.72	2.77	26.94	118.1	0.787
1181	3.36	34.51	0.88	3.13	500	5.61	34.22	0.47	2.98	27.00	112.6	0.902
					600	5.12	34.22	0.40	3.12	27.07	107.6	1.012
					700	4.77	34.33	0.40	3.16	27.19	95.9	1.114
					800	4.44	34.41	0.45	3.18	27.30	87.0	1.205
					1000	3.84	34.48	0.66	3.16	27.41	76.8	1.369

909 CREST; November 17, 1949; 2117 GCT; 30°10'N, 123°37'W; sounding, 2,375 fm; wind, 040°, force 1; weather, partly cloudy; sea, moderate; wire angle 3°.

0	18.1	33.44E	5.35	0.52	0	18.1	33.44	5.35	0.52	24.08	384.5	0.000
10	18.01	33.42	5.27	0.43	10	18.01	33.42	5.27	0.43	24.08	385.0	0.038
25	17.96	33.42	5.32	0.44	20	17.98	33.42	5.30	0.43	24.09	384.5	0.077
50	17.40	33.42	5.32	0.57	30	17.95	33.42	5.33	0.45	24.09	383.9	0.115
80	13.99	33.37	5.80	0.82	50	17.40	33.42	5.32	0.57	24.24	370.7	0.191
105	13.44	33.42	5.70	1.03	75	14.15	33.38	5.78	0.78	24.92	306.2	0.276
158	10.53	33.44	4.68	1.75	100	13.58	33.41	5.74	1.00	25.07	293.2	0.350
211	8.63	33.82	3.18	2.26	150	10.89	33.43	4.94	1.64	25.59	243.5	0.484
312	7.01	34.04	2.08	2.64	200	8.93	33.76	3.38	2.19	26.18	188.4	0.593
419	5.84	34.07	1.04	3.01	250	7.97	33.94	2.72	2.44	26.47	161.5	0.680
624	4.94	34.33	0.36	3.08	300	7.18	34.03	2.20	2.60	26.65	144.4	0.756
828	4.18	34.33	0.57	3.18	400	6.02	34.06	1.20	2.98	26.83	128.2	0.893
1200	3.32	34.51	0.99	3.17	500	5.46	34.21	0.60	3.05	27.02	111.3	1.012
					600	5.05	34.33	0.36	3.07	27.16	98.5	1.117
					700	4.62	34.33	0.45	3.13	27.21	94.1	1.213
					800	4.28	34.33	0.55	3.18	27.25	91.1	1.306
					1000	3.75	34.40	0.72	3.18	27.36	81.5	1.478

E See footnote page 313.

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

CREST; November 17, 1949; 1423 GCT; 29°50'N, 124°16'W; sounding, 2,400 fm; wind 020°, force 2; weather, partly cloudy; sea, moderate; wire angle, 5°. 910

0	18.5	33.58E	5.31	0.51	0	18.5	33.58	5.31	0.51	24.07	385.4	0.000
10	18.40	33.55	5.19	0.39	10	18.40	33.55	5.19	0.39	24.08	384.6	0.038
25	18.34	33.56	5.25	0.45	20	18.35	33.55	5.23	0.42	24.10	383.6	0.077
50	18.43	33.70	5.34	0.44	30	18.34	33.58	5.27	0.46	24.12	381.5	0.115
80	14.90	33.57	5.82	0.40	50	18.43	33.70	5.34	0.44	24.20	376.8	0.191
105	14.09	33.66	5.66	0.38	75	15.18	33.58	5.78	0.40	24.86	312.5	0.277
159	10.78	33.49	4.82	1.09	100	14.28	33.65	5.72	0.38	25.10	289.7	0.352
213	8.97	33.81	3.62	1.70	150	11.30	33.49	5.02	0.92	25.57	246.3	0.486
314	7.45	34.07	2.23	2.26	200	9.32	33.73	3.88	1.58	26.09	196.6	0.598
421	5.94	34.07	1.59	2.63	250	8.25	33.95	3.00	1.94	26.43	165.0	0.688
624	-	34.29	0.45	3.07	300	7.58	34.05	2.37	2.20	26.61	148.5	0.766
932	3.98	34.48	0.69	3.10	400	6.22	34.07	1.67	2.57	26.81	130.1	0.905
1200	3.36	34.52	0.98	2.97	500	5.49	34.10	1.02	2.83	26.93	119.8	1.030
					600	5.05	34.25	0.48	3.00	27.10	104.4	1.142
					700	4.70	34.37	0.51	3.06	27.23	92.1	1.240
					800	4.38	34.44	0.59	3.08	27.32	84.1	1.328
					1000	3.80	34.50	0.76	3.08	27.43	74.7	1.487

CREST; November 17, 1949; 0946 GCT; 29°34'N, 124°52'W; sounding, 2,300 fm; wind, calm; weather, fog; sea, moderate; wire angle, 6°. 911

0	18.64	33.51E	5.21	0.39	0	18.64	33.51	5.21	0.39	23.99	393.0	0.000
10	18.62	33.51	5.16	0.38	10	18.62	33.51	5.16	0.38	24.00	392.5	0.039
25	18.58	33.53	5.28	0.41	20	18.60	33.52	5.24	0.39	24.01	391.8	0.079
50	18.46	33.50	5.16	0.40	30	18.55	33.53	5.27	0.42	24.03	390.0	0.118
80	14.26	33.46	5.84	0.42	50	18.46	33.50	5.16	0.40	24.03	390.5	0.196
104	13.09	33.49	5.41	0.58	75	15.00	33.46	5.78	0.41	24.81	317.5	0.284
158	10.58	33.52	4.52	1.14	100	13.32	33.49	5.48	0.53	25.18	282.4	0.359
210	8.90	33.82	3.19	1.84	150	10.95	33.51	4.67	1.06	25.64	238.8	0.489
312	7.46	34.05	2.29	2.31	200	9.14	33.77	3.36	1.75	26.14	190.8	0.597
420	6.36	34.16	1.04	2.77	250	8.26	33.95	2.85	2.05	26.43	165.0	0.686
626	5.04	34.32	0.38	3.03	300	7.60	34.04	2.43	2.25	26.60	149.6	0.764
936	3.92	34.47	0.62	3.12	400	6.53	34.14	1.20	2.70	26.83	129.0	0.904
1202	3.30	34.55	0.98	3.19	500	5.80	34.23	0.62	2.92	26.99	114.1	1.025
					600	5.18	34.30	0.39	3.02	27.12	102.3	1.133
					700	4.72	34.36	0.39	3.05	27.22	93.2	1.231
					800	4.33	34.41	0.46	3.08	27.30	85.9	1.321
					1000	3.75	34.49	0.70	3.14	27.43	74.9	1.481

CREST; November 14, 1949; 1333 GCT; 31°24'N, 116°56'W; sounding, 450 fm; wind, calm; weather, clear; sea, moderate; wire angle, 0°. 1001

0	17.46	33.65E	5.63	0.44	0	17.46	33.65	5.63	0.44	24.39	355.0	0.000
10	17.41	33.64	5.58	0.42	10	17.41	33.64	5.58	0.42	24.39	354.9	0.036
25	16.45	33.58	5.80	0.47	20	17.37	33.62	5.77	0.44	24.39	355.8	0.071
50	12.1	33.45	5.30	0.98	30	14.60	33.55	5.78	0.55	24.96	301.6	0.104
80	10.22	33.57	4.14	1.55	50	12.1	33.45	5.30	0.98	25.40	260.4	0.160
114	9.71	33.87	2.81	1.96	75	10.35	33.54	4.37	1.46	25.77	224.9	0.221
168	9.46	34.18	2.01	2.21	100	9.89	33.71	3.25	1.84	25.99	205.1	0.274
221	8.91	34.22	1.65	2.38	150	9.54	34.12	2.22	2.15	26.36	170.4	0.368
327	7.36	34.22	1.22	2.58	200	9.16	34.21	1.77	2.31	26.50	158.5	0.450
433	6.46	34.29	0.66	2.78	250	8.49	34.22	1.54	2.45	26.61	148.5	0.527
637	5.37	34.40	0.39	3.07	300	7.69	34.21	1.36	2.52	26.72	138.4	0.599
					400	6.69	34.27	0.80	2.72	26.91	121.3	0.729
					500	6.05	34.33	0.51	2.89	27.04	109.8	0.844
					600	5.53	34.38	0.41	3.03	27.14	101.0	0.949

E See footnote page 313.

SIO

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OBSERVED					INTERPOLATED					COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m

1002 CREST; November 14, 1949; 1840 GCT; 31°03'N, 117°35'W; sounding, 880 fm; wind, variable, force 1; weather, low fog; sea, slight; wire angle, 0°.

0	17.69	33.62E	5.47	0.42	0	17.69	33.62	5.47	0.42	24.31	362.6	0.000
10	17.49	33.63	5.44	0.45	10	17.49	33.63	5.44	0.45	24.37	357.7	0.036
25	13.28	33.48	6.06	0.56	20	15.75	33.53	6.05	0.50	24.69	326.6	0.070
50	10.9	33.62	3.12	-	30	12.55	33.49	6.05	0.72	25.33	266.0	0.100
80	10.52	33.77	2.37	1.97	50	10.94	33.62	3.12	1.36	25.73	228.2	0.149
105	10.32	33.87	2.10	2.14	75	10.58	33.74	2.44	1.88	25.89	213.9	0.204
159	9.75	34.07	1.91	2.25	100	10.34	33.85	2.14	2.12	26.02	202.3	0.257
214	9.46	34.25	1.37	2.44	150	9.85	34.04	1.94	2.24	26.25	181.3	0.352
317	8.46	34.32	1.00	2.66	200	9.52	34.20	1.50	2.40	26.43	164.9	0.439
425	7.01	34.29	0.65	2.94	250	9.20	34.31	1.19	2.54	26.57	152.8	0.519
630	5.54	34.37	0.32	3.16	300	8.67	34.32	1.04	2.63	26.66	144.6	0.593
939	4.26	34.47	0.49	3.18	400	7.28	34.29	0.75	2.87	26.84	128.0	0.729
1206	3.45	34.56	0.85	3.15	500	6.36	34.31	0.45	3.06	26.98	115.3	0.851
					600	5.71	34.36	0.34	3.15	27.10	104.8	0.961
					700	5.19	34.39	0.32	3.17	27.19	96.7	1.061
					800	4.78	34.42	0.36	3.18	27.26	90.5	1.155
					1000	4.06	34.49	0.55	3.18	27.41	78.6	1.325

1003 CREST; November 14, 1949; 2358 GCT; 30°40'N, 118°12'W; sounding, 1,260 fm; wind, 330°, force 1; weather, partly cloudy; sea, rough; wire angle, 0°.

0	18.52	33.67E	5.55	0.38	0	18.52	33.67	5.55	0.38	24.15	378.4	0.000
10	17.36	33.60	5.70	0.40	10	17.36	33.60	5.70	0.40	24.38	356.6	0.037
25	15.59	33.53	6.04	0.46	20	16.85	33.54	6.02	0.43	24.45	350.0	0.072
50	12.6	33.53	5.28	0.96	30	14.35	33.53	6.01	0.50	25.00	298.0	0.104
80	10.82	33.55	4.18	1.31	50	12.56	33.53	5.28	0.96	25.36	263.8	0.161
105	10.00	33.75	3.28	1.77	75	11.00	33.54	4.38	1.25	25.66	235.8	0.223
160	9.14	34.08	2.48	2.16	100	10.10	33.67	3.88	1.69	25.92	211.7	0.279
214	8.86	34.18	1.82	2.38	150	9.22	34.05	2.56	2.11	26.36	170.4	0.375
317	7.66	34.24	1.06	2.70	200	8.93	34.16	2.00	2.33	26.49	158.7	0.457
425	6.74	34.31	0.61	2.88	250	8.49	34.21	1.48	2.50	26.60	149.3	0.536
630	5.47	34.37	0.39	3.13	300	7.83	34.23	1.14	2.65	26.71	139.1	0.606
937	4.18	34.49	0.59	3.15	400	6.93	34.30	0.70	2.84	26.90	122.8	0.737
1203	3.40	34.52	0.93	3.21	500	6.23	34.33	0.45	3.00	27.02	112.3	0.854
					600	5.63	34.36	0.38	3.11	27.11	103.7	0.962
					700	5.11	34.39	0.42	3.14	27.20	95.8	1.062
					800	4.67	34.44	0.48	3.14	27.29	87.5	1.154
					1000	3.98	34.50	0.65	3.16	27.41	76.9	1.319

1004 CREST; November 15, 1949; 0546 GCT; 30°21'N, 118°50'W; sounding, 2,030 fm; wind, variable, force 1; weather, clear; sea, rough; wire angle, 5°.

0	18.26	33.51E	5.31	0.42	0	18.26	33.51	5.31	0.42	24.09	383.6	0.000
10	18.13	33.53	5.31	0.36	10	18.13	33.53	5.31	0.36	24.13	379.7	0.038
25	18.07	33.55	4.84	0.38	20	18.08	33.54	4.85	0.36	24.15	378.2	0.076
50	15.9	33.39	5.57	0.43	30	18.05	33.55	4.85	0.39	24.17	377.0	0.114
80	13.50	33.37	5.59	0.47	50	15.95	33.39	5.57	0.43	24.54	341.8	0.186
104	12.66	33.44	5.41	0.66	75	13.66	33.37	5.59	0.46	25.02	297.1	0.266
156	9.49	33.62	3.72	1.58	100	12.93	33.42	5.46	0.62	25.20	280.1	0.338
207	8.45	33.91	3.01	1.94	150	9.63	33.60	3.85	1.51	25.94	210.3	0.460
306	7.16	33.98	1.89	2.38	200	8.57	33.89	3.10	1.91	26.34	173.1	0.556
412	6.33	34.16	1.04	2.70	250	7.78	33.96	2.50	2.15	26.51	157.3	0.639
615	5.16	34.33	0.37	2.99	300	7.22	33.98	1.96	2.36	26.61	148.8	0.716
923	4.12	34.40	0.54	3.11	400	6.41	34.14	1.12	2.66	26.84	127.4	0.853
1191	3.29	34.45	0.97	3.03	500	5.73	34.27	0.64	2.89	27.03	110.4	0.972
					600	5.21	34.33	0.37	2.98	27.14	100.6	1.077
					700	4.92	34.35	0.38	3.04	27.19	96.4	1.176
					800	4.66	34.37	0.44	3.08	27.24	92.7	1.270
					1000	3.95	34.41	0.60	3.10	27.34	83.3	1.447

E See footnote page 313.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

CREST; November 15, 1949; 1109 GCT; 29°56'N, 119°29'W; sounding, 1,945 fm; wind, calm; weather, clear; sea, moderate; wire angle, 12°. 1005

0	18.98	33.71E	5.30	0.39	0	18.98	33.71	5.30	0.39	24.07	386.0	0.000	
10	18.98	33.66	5.55	0.37	10	18.98	33.66	5.55	0.37	24.03	390.0	0.039	
25	18.90	33.73	5.61	0.40	20	18.92	33.72	5.60	0.38	24.08	384.8	0.078	
49	18.5	33.73	5.62	0.40	30	18.87	33.73	5.62	0.40	24.10	383.3	0.116	
79	15.06	33.55	5.75	0.42	50	18.49	33.73	5.62	0.40	24.20	374.8	0.192	
103	13.71	33.62	5.55	0.61	75	15.50	33.56	5.73	0.41	24.77	320.5	0.279	
156	10.62	33.69	4.33	1.38	100	13.83	33.61	5.60	0.59	25.17	283.6	0.354	
209	9.10	33.82	3.60	1.78	150	10.85	33.68	4.48	1.33	25.80	204.3	0.476	
308	7.58	34.05	2.32	2.36	200	9.25	33.80	3.70	1.73	26.16	190.4	0.575	
413	6.44	34.09	1.14	2.82	250	8.41	33.94	3.13	1.99	26.40	168.0	0.664	
613	5.20	34.31	0.43	3.13	300	7.70	34.04	2.42	2.31	26.59	151.0	0.744	
917	4.14	34.43	0.68	3.23	400	6.55	34.08	1.25	2.79	26.78	133.6	0.886	
1185	3.42	34.51	0.92	3.22	500	5.79	34.20	0.68	2.99	26.97	116.2	1.011	
					600	5.25	34.30	0.44	3.12	27.11	103.3	1.121	
					700	4.85	34.35	0.50	3.18	27.20	95.6	1.220	
					800	4.50	34.39	0.58	3.22	27.27	89.2	1.313	
					1000	3.88	34.46	0.75	3.24	27.39	78.7	1.480	

CREST; November 15, 1949; 1703 GCT; 29°25'N, 120°07'W; sounding, 2,200 fm; wind, 340°, force 2; weather, low fog; sea, rough; wire angle, 3°. 1006

0	19.22	33.69E	5.21	0.37	0	19.22	33.69	5.21	0.37	23.99	393.4	0.000	
10	19.18	33.62	5.14	0.41	10	19.18	33.62	5.14	0.41	23.95	397.8	0.040	
25	19.16	33.71	5.19	0.40	20	19.15	33.69	5.17	0.41	24.00	392.6	0.079	
50	19.1	33.69	5.13	0.38	30	19.15	33.71	5.20	0.40	24.02	391.5	0.118	
80	14.72	33.53	5.60	0.41	50	19.15	33.69	5.13	0.38	24.00	393.5	0.197	
105	14.34	33.71	5.24	0.47	75	14.90	33.54	5.60	0.40	24.89	309.6	0.285	
160	10.08	33.48	4.32	1.24	100	14.41	33.70	5.30	0.45	25.12	288.5	0.360	
214	8.56	33.82	3.40	1.72	150	10.74	33.49	4.49	1.10	25.66	236.9	0.490	
317	7.32	33.98	1.90	2.34	200	8.81	33.79	3.65	1.60	26.22	184.2	0.596	
423	6.30	34.13	0.89	2.78	250	8.08	33.88	2.85	1.96	26.41	167.5	0.684	
627	5.14	34.23	0.41	3.02	300	7.50	33.96	2.13	2.26	26.55	154.1	0.764	
936	4.11	34.49r	0.58	3.03	400	6.50	34.10	1.04	2.70	26.80	131.3	0.907	
1203	3.36	34.49	0.94	3.05	500	5.77	34.20	0.57	2.95	26.97	116.2	1.031	
					600	5.27	34.23	0.42	3.02	27.06	108.5	1.143	
					700	4.86	34.26	0.43	3.02	27.13	102.3	1.248	
					800	4.53	34.34	0.49	3.02	27.23	93.3	1.346	
					1000	3.92	34.44	0.62	3.04	27.37	80.6	1.520	

CREST; November 15, 1949; 2158 GCT; 29°09'N, 120°46'W; sounding, 2,125 fm; wind, variable, force 1; weather, cloudy; sea, moderate; wire angle, 0°. 1007

0	19.19	33.44E	5.19	0.36	0	19.19	33.44	5.19	0.36	23.80	411.1	0.000	
10	18.60	33.49	5.12	0.38	10	18.60	33.49	5.12	0.38	23.99	393.3	0.040	
25	18.55	33.35	5.29	0.40	20	18.55	33.35	5.22	0.39	23.89	403.0	0.080	
50	18.51	33.44	5.34	0.38	30	18.53	33.36	5.31	0.40	23.91	401.9	0.120	
80	14.54	33.53	5.83	0.35	50	18.51	33.44	5.34	0.38	23.97	396.4	0.200	
104	14.02	33.62	5.52	0.39	75	14.75	33.51	5.81	0.35	24.90	308.7	0.288	
158	10.23	33.49	4.52	1.22	100	14.10	33.61	5.60	0.37	25.11	288.9	0.363	
212	8.69	33.78	3.64	1.70	150	10.66	33.50	4.67	1.12	25.69	234.5	0.493	
314	7.32	33.98	2.17	2.30	200	8.90	33.70	3.87	1.60	26.14	192.3	0.601	
422	6.22	34.05	0.97	2.74	250	8.13	33.88	3.10	1.94	26.39	168.3	0.691	
628	5.04	34.23	0.40	3.05	300	7.48	33.96	2.39	2.23	26.56	153.7	0.771	
936	4.08	34.40	0.62	3.09	400	6.40	34.03	1.15	2.67	26.76	135.3	0.916	
1203	3.36	34.54	0.91	3.04	500	5.68	34.12	0.57	2.92	26.92	120.8	1.044	
					600	5.17	34.21	0.40	3.02	27.05	108.8	1.159	
					700	4.80	34.27	0.41	3.06	27.14	100.9	1.263	
					800	4.49	34.33	0.49	3.08	27.23	93.5	1.361	
					1000	3.89	34.43	0.69	3.08	27.37	80.9	1.535	

E See footnote page 313.

S10

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4911

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

1008 CREST; November 16, 1949; 0300 GCT; 28°43'N, 121°15'W; sounding, 2,400 fm; wind, 340°, force 2; weather, cloudy; sea, missing; wire angle, 2°.

0	18.88	33.53 E	5.26	0.38	0	18.88	33.53	5.26	0.38	23.95	397.0	0.000
10	18.37	33.48	5.18	0.40	10	18.37	33.48	5.18	0.40	24.04	388.7	0.039
25	18.28	33.51	5.16	0.41	20	18.29	33.50	5.14	0.41	24.07	385.8	0.078
50	17.40	33.49	5.44	0.39	30	18.25	33.50	5.16	0.41	24.09	385.0	0.117
80	14.42	33.58	5.67	0.36	50	17.40	33.49	5.44	0.39	24.28	366.9	0.192
105	13.91	33.64	5.46	0.42	75	14.75	33.56	5.65	0.36	24.94	305.1	0.276
159	11.36	33.60	4.76	0.94	100	13.95	33.63	5.53	0.40	25.16	284.5	0.349
213	8.78	33.82	3.74	1.70	150	12.30	33.60	4.89	0.82	25.47	256.1	0.484
315	7.58	34.13	2.06	2.40	200	9.09	33.75	4.00	1.54	26.15	191.4	0.597
422	6.48	34.22	1.03	2.82	250	8.21	33.98	3.12	2.02	26.46	162.1	0.685
626	5.32	34.38	0.42	3.11	300	7.74	34.11	2.30	2.33	26.63	146.6	0.763
934	4.09	34.53	0.66	3.30	400	6.66	34.20	1.18	2.75	26.86	126.1	0.898
1203	3.44	34.56	0.90	3.21	500	6.00	34.28	0.65	2.99	27.01	112.8	1.018
					600	5.46	34.36	0.45	3.09	27.14	101.5	1.125
					700	4.95	34.43	0.46	3.17	27.25	91.0	1.221
					800	4.53	34.48	0.55	3.24	27.34	83.1	1.308
					1000	3.90	34.54	0.68	3.30	27.45	73.1	1.464

1009 CREST; November 16, 1949; 1143 GCT; 28°31'N, 121°52'W; sounding, 2,225 fm; wind, 040°, force 1; weather, cloudy; sea, moderate; wire angle, 0°.

0	18.56	33.66 E	4.73	0.51	0	18.56	33.66	4.73	0.51	24.13	379.8	0.000
10	18.54	33.66	5.18	0.46	10	18.54	33.66	5.18	0.46	24.13	379.7	0.038
25	18.53	33.66	5.20	0.46	20	18.53	33.66	5.19	0.46	24.13	380.0	0.076
50	18.90	34.02	5.30	0.45	30	18.55	33.66	5.22	0.46	24.13	380.7	0.114
80	14.98	33.64	5.68	0.45	50	18.90	34.02	5.30	0.45	24.32	363.4	0.188
105	14.54	33.71	5.48	0.45	75	15.10	33.65	5.65	0.46	24.93	305.7	0.272
158	10.98	33.53	4.73	1.12	100	14.65	33.71	5.55	0.45	25.07	292.8	0.347
213	9.58	33.80	3.97	1.46	150	11.29	33.54	4.83	1.02	25.61	242.2	0.480
315	7.72	34.09	2.31	2.22	200	9.85	33.70	4.15	1.37	25.98	207.4	0.594
422	6.48	34.20	1.25	2.64	250	8.80	33.97	3.38	1.75	26.37	171.7	0.688
626	5.32	34.36	0.42	2.98	300	7.93	34.07	2.56	2.12	26.58	152.1	0.769
933	4.22	34.49	0.62	3.18	400	6.66	34.18	1.40	2.58	26.84	127.7	0.909
1201	3.47	34.54	0.89	3.18	500	5.98	34.27	0.85	2.78	27.00	113.2	1.029
					600	5.45	34.34	0.46	2.94	27.12	102.8	1.137
					700	5.02	34.40	0.45	3.07	27.22	93.8	1.235
					800	4.65	34.45	0.50	3.14	27.30	86.6	1.325
					1000	4.02	34.50	0.67	3.18	27.41	77.3	1.489

1010 CREST; November 16, 1949; 1547 GCT; 28°09'N, 122°26'W; sounding, 2,400 fm; wind, 340°, force 2; weather, low fog; sea, moderate; wire angle, 5°.

0	19.22	34.05 E	5.08	0.38	0	19.22	34.05	5.08	0.38	24.26	367.9	0.000
10	19.22	34.05	5.13	0.37	10	19.22	34.05	5.13	0.37	24.26	368.2	0.037
25	19.16	34.05	5.08	0.38	20	19.20	34.05	5.10	0.38	24.26	367.7	0.074
50	18.92	34.02	5.25	0.37	30	19.14	34.05	5.07	0.38	24.28	366.7	0.110
80	15.78	33.78	5.53	0.41	50	18.92	34.02	5.25	0.37	24.31	364.4	0.183
105	15.0	33.90	5.34	0.43	75	16.28	33.79	5.51	0.39	24.77	320.6	0.269
159	12.81	33.73	4.71	0.86	100	15.20	33.89	5.40	0.42	25.09	290.9	0.346
212	10.06	33.89	2.94	1.84	150	13.45	33.73	4.82	0.72	25.34	268.5	0.485
314	7.94	34.09	2.53	2.13	200	10.40	33.84	3.24	1.70	26.00	206.1	0.604
422	6.64	34.16	1.19	2.70	250	9.18	33.98	2.74	1.97	26.31	176.6	0.700
626	5.48	34.36	0.47	3.00	300	8.23	34.07	2.59	2.09	26.53	156.6	0.783
934	4.21	34.47	0.66	3.11	400	6.83	34.15	1.45	2.61	26.79	132.4	0.928
1202	3.49	34.54	0.94	3.08	500	6.12	34.21	0.71	2.87	26.93	119.6	1.054
					600	5.60	34.35	0.49	2.97	27.11	104.0	1.165
					700	5.15	34.39	0.49	3.04	27.20	96.4	1.266
					800	4.75	34.43	0.54	3.08	27.27	89.4	1.358
					1000	4.05	34.49	0.73	3.11	27.40	78.5	1.526

E See footnote page 313.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	
CREST; November 16, 1949; 1953 GCT; 27°56'N, 122°59'W; sounding, 2,350 fm; wind, 020°, force 1; weather, cloudy; sea, slight; wire angle, 5°.													1011
0	19.40	34.05E	5.10	0.35	0	19.40	34.05	5.10	0.35	24.21	371.9	0.000	
10	19.18	34.08	5.02	0.35	10	19.18	34.08	5.02	0.35	24.29	364.7	0.037	
25	19.11	34.05	5.12	0.36	20	19.14	34.06	5.08	0.36	24.28	365.6	0.073	
50	18.92	34.07	5.19	0.35	30	19.09	34.05	5.15	0.36	24.29	365.4	0.110	
80	15.32	33.77	5.46	0.38	50	18.92	34.07	5.19	0.35	24.35	360.2	0.182	
105	14.39	33.73	5.24	0.55	75	16.38	33.78	5.45	0.37	24.74	323.5	0.268	
160	11.48	33.64	3.82	1.36	100	14.70	33.74	5.35	0.50	25.09	291.5	0.345	
214	9.99	33.95	2.75	1.86	150	11.90	33.65	4.05	1.24	25.58	245.0	0.479	
316	8.74	34.23	1.42	2.36	200	10.20	33.87	3.00	1.76	26.06	200.4	0.591	
422	7.64	34.31	0.69	2.68	250	9.50	34.10	2.24	2.08	26.36	173.0	0.684	
624	5.84	34.36	0.38	2.92	300	8.90	34.21	1.60	2.30	26.54	156.5	0.766	
929	4.30	34.47	0.60	2.94	400	7.86	34.30	0.80	2.62	26.77	135.8	0.912	
1197	3.55	34.51	0.91	2.91	500	6.92	34.33	0.49	2.81	26.92	121.8	1.041	
					600	6.06	34.35	0.39	2.91	27.05	109.8	1.157	
					700	5.34	34.40	0.41	2.93	27.18	98.1	1.261	
					800	4.82	34.43	0.49	2.94	27.27	90.4	1.355	
					1000	4.08	34.48	0.69	2.94	27.39	79.6	1.525	
CREST; November 14, 1949; 1627 GCT; 30°14'N, 116°21'W; sounding, 1,120 fm; wind, calm; weather, clear; sea, very rough; wire angle, 3°.													1061
0	18.16	33.63E	5.34	0.39	0	18.16	33.63	5.34	0.39	24.20	372.8	0.000	
10	17.93	33.62	5.27	0.42	10	17.93	33.62	5.27	0.42	24.25	368.5	0.037	
25	17.84	33.60	5.34	0.42	20	17.86	33.60	5.30	0.42	24.26	368.4	0.074	
50	13.88	33.40	5.84	0.49	30	17.82	33.58	5.43	0.42	24.25	369.4	0.111	
80	11.10	33.42	4.72	1.12	50	13.88	33.40	5.84	0.49	25.00	298.5	0.178	
105	9.97	33.63	3.64	1.62	75	11.54	33.40	4.96	0.94	25.45	255.7	0.247	
160	9.19	33.99	2.67	2.01	100	10.07	33.57	3.83	1.56	25.84	218.6	0.306	
214	8.46	34.12	2.15	2.25	150	9.37	33.96	2.79	1.98	26.27	179.4	0.406	
316	7.58	34.26	0.94	2.76	200	8.63	34.10	2.27	2.19	26.49	158.7	0.490	
423	6.76	34.31	0.51	2.95	250	8.12	34.18	1.74	2.44	26.63	146.0	0.566	
628	5.46	34.41	0.30	3.10	300	7.79	34.24	1.09	2.70	26.75	136.1	0.637	
938	4.12	34.50	0.60	3.18	400	6.93	34.30	0.58	2.92	26.90	122.7	0.766	
1206	3.43	34.56	0.85	3.22	500	6.25	34.35	0.40	3.02	27.03	111.1	0.883	
					600	5.62	34.40	0.30	3.08	27.15	100.5	0.989	
					700	5.06	34.44	0.35	3.12	27.25	91.5	1.085	
					800	4.61	34.47	0.45	3.16	27.32	84.8	1.173	
					1000	3.93	34.52	0.66	3.20	27.43	74.8	1.332	
CREST; November 13, 1949; 2329 GCT; 29°30'N, 116°05'W; sounding, 1,280 fm; wind, 320°, force 2; weather, partly cloudy; sea, moderate; wire angle, 0°.													1101
0	18.44	33.54E	5.94	0.43	0	18.44	33.54	5.94	0.43	24.07	386.0	0.000	
10	17.86	33.58	5.53	0.43	10	17.86	33.58	5.53	0.43	24.24	369.8	0.038	
25	17.74	33.56	5.74	0.45	20	17.77	33.57	5.63	0.44	24.25	368.6	0.075	
50	13.8	33.40	5.99	0.52	30	17.74	33.53	5.81	0.46	24.23	371.3	0.112	
79	11.56	33.40	5.11	1.03	50	13.8	33.40	5.99	0.52	25.01	297.6	0.179	
103	10.22	33.51	4.37	1.40	75	11.82	33.40	5.30	0.98	25.40	260.3	0.255	
157	8.96	33.97	3.10	1.93	100	10.39	33.48	4.47	1.36	25.72	230.4	0.317	
210	8.43	34.11	2.29	2.20	150	9.04	33.92	3.24	1.88	26.29	177.1	0.419	
312	7.78	34.29	0.90	2.77	200	8.52	34.09	2.45	2.14	26.50	157.9	0.502	
420	6.80	34.31	0.52	2.96	250	8.18	34.19	1.72	2.44	26.63	146.3	0.578	
625	5.52	34.38	0.35	3.13	300	7.88	34.27	1.02	2.72	26.74	136.5	0.649	
933	4.30	34.48	0.55	3.10	400	6.98	34.31	0.55	2.94	26.90	122.5	0.779	
1201	3.50	34.55	-	3.15	500	6.22	34.33	0.41	3.05	27.02	112.1	0.896	
					600	5.64	34.37	0.35	3.12	27.12	103.0	1.003	
					700	5.17	34.40	0.37	3.13	27.20	95.8	1.103	
					800	4.78	34.44	0.44	3.12	27.28	89.1	1.195	
					1000	4.08	34.50	-	3.11	27.40	78.1	1.362	

E See footnote page 313.

SIO

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4911

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

1102 CREST; November 13, 1949; 1827 GCT; 29°12'N, 116°41'W; sounding, 2,200 fm; wind, 360°, force 3; weather, partly cloudy; sea, moderate; wire angle, 7°.

0	17.78	33.62E	5.42	0.45	0	17.78	33.62	5.42	0.45	24.29	364.6	0.000
10	17.54	33.62	5.34	0.46	10	17.54	33.62	5.34	0.46	24.35	359.6	0.036
25	17.51	33.61	5.30	0.45	20	17.51	33.61	5.30	0.45	24.35	360.0	0.072
50	15.6	33.33	5.72	0.54	30	17.50	33.60	5.35	0.46	24.34	360.7	0.108
79	12.22	33.37	5.19	0.90	50	15.56	33.33	5.72	0.54	24.58	338.0	0.178
104	10.82	33.53	3.98	1.44	75	12.56	33.35	5.28	0.82	25.22	277.6	0.255
158	8.77	33.84	3.35	1.81	100	11.03	33.50	4.05	1.39	25.62	239.8	0.320
211	8.20	34.05	3.06	-	150	8.94	33.80	3.42	1.74	26.21	184.7	0.426
310	7.35	34.21	1.17	2.60	200	8.30	34.01	3.11	2.12	26.47	160.4	0.512
416	6.24	34.22	0.74	2.83	250	7.88	34.15	2.47	2.39	26.65	144.7	0.588
618	5.53	34.40	0.28	3.06	300	7.46	34.21	1.28	2.57	26.75	135.0	0.658
924	4.22	34.46	0.51	3.11	400	6.39	34.21	0.79	2.79	26.90	121.7	0.787
1189	3.48	34.52	0.81	3.14	500	5.85	34.33	0.48	2.96	27.06	107.3	0.901
					600	5.60	34.40	0.29	3.05	27.15	100.2	1.005
					700	5.16	34.41	0.30	3.08	27.21	95.0	1.102
					800	4.70	34.43	0.38	3.09	27.28	88.8	1.194
					1000	3.99	34.48	0.60	3.12	27.40	78.5	1.361

1103 CREST; November 13, 1949; 1333 GCT; 28°54'N, 117°19'W; sounding, 2,000 fm; wind, 320°, force 2; weather, partly cloudy; sea, moderate; wire angle, 18°.

0	19.04	33.80E	5.28	0.39	0	19.04	33.80	5.28	0.39	24.11	381.5	0.000
27	19.04	33.84	5.17	0.42	10	19.04	33.82	5.20	0.40	24.13	380.5	0.038
41	19.02	33.77	5.22	0.41	20	19.04	33.84	5.17	0.41	24.14	379.2	0.076
64	16.1	33.77	5.72	0.40	30	19.04	33.83	5.18	0.42	24.14	380.2	0.114
91	15.26	33.75	5.61	0.40	50	17.75	33.77	5.38	0.40	24.41	354.5	0.188
113	15.29	33.95	5.31	0.43	75	15.55	33.76	5.69	0.40	24.92	307.0	0.270
161	10.83	33.58	4.48	1.31	100	15.28	33.90	5.50	0.40	25.08	291.7	0.345
207	9.32	33.95	3.16	1.96	150	11.85	33.59	4.72	1.07	25.54	248.6	0.480
298	8.20	34.04	1.80	2.49	200	9.46	33.92	3.35	1.89	26.22	184.8	0.589
398	7.24	34.18	0.95	2.87	250	8.74	34.00	2.40	2.24	26.40	168.8	0.677
592	6.00	34.29	0.28	3.20	300	8.17	34.04	1.76	2.50	26.52	158.1	0.677
889	4.36	34.31	0.51	3.28	400	7.24	34.18	0.94	2.88	26.76	135.7	0.905
1151	3.63	34.42	0.79	3.20	500	6.62	34.26	0.50	3.10	26.91	122.6	1.035
					600	5.94	34.29	0.28	3.20	27.02	112.6	1.152
					700	5.25	34.30	0.35	3.24	27.11	104.2	1.261
					800	4.75	34.31	0.44	3.27	27.18	98.3	1.362
					1000	4.03	34.34	0.64	3.26	27.28	89.2	1.550

1104 CREST; November 13, 1949; 0806 GCT; 28°33'N, 117°58'W; sounding, 1,975 fm; wind, 020°, force 3; weather, partly cloudy; sea, rough; wire angle, 8°.

0	18.86	33.68E	5.25	0.38	0	18.86	33.68	5.25	0.38	24.07	385.6	0.000
10	18.85	33.58	5.20	0.39	10	18.85	33.58	5.20	0.39	24.00	393.0	0.039
25	18.80	33.64	5.29	0.40	20	18.83	33.63	5.25	0.39	24.04	389.4	0.078
50	17.6	33.58	5.34	0.42	30	18.78	33.64	5.30	0.40	24.07	387.7	0.117
79	15.36	33.66	5.78	0.39	50	17.61	33.58	5.34	0.42	24.30	365.1	0.192
102	14.04	33.51	5.41	0.50	75	15.52	33.66	5.78	0.39	24.85	313.5	0.277
155	10.84	33.64	3.51	1.60	100	14.04	33.51	5.48	0.46	25.05	295.4	0.353
206	9.96	34.02	2.31	2.13	150	10.97	33.62	3.78	1.54	25.73	231.0	0.484
305	8.41	34.23	1.46	2.50	200	10.03	33.99	2.39	2.09	26.18	189.0	0.590
408	7.64	34.27	0.58	2.79	250	9.28	34.15	1.90	2.33	26.43	165.9	0.679
608	6.03	34.34	0.33	3.05	300	8.48	34.22	1.51	2.48	26.61	149.3	0.757
910	4.40	34.45	0.47	3.20	400	7.70	34.27	0.62	2.76	26.77	135.7	0.900
1175	3.58	34.56	0.81	3.07	500	7.03	34.30	0.37	2.96	26.89	125.3	1.030
					600	6.11	34.34	0.35	3.04	27.04	111.3	1.149
					700	5.40	34.37	0.35	3.11	27.15	101.0	1.255
					800	4.87	34.41	0.40	3.17	27.25	92.4	1.352
					1000	4.10	34.49	0.53	3.18	27.39	79.1	1.523

E See footnote page 313.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

CREST, November 12, 1949; 1534 GCT; 28°10'N, 118°38'W; sounding, 2,150 fm; wind, 020°, force 4; weather, partly cloudy; sea, rough; wire angle, 25°. 1105

0	18.90	33.77E	5.32	0.42	0	18.90	33.77	5.32	0.42	24.13	380.0	0.000
8	18.92	33.78	5.27	0.38	10	18.92	33.78	5.27	0.38	24.13	380.1	0.038
22	18.88	33.77	5.42	0.38	20	18.89	33.77	5.38	0.38	24.13	380.4	0.076
44	18.8	33.76	5.52	0.37	30	18.81	33.77	5.46	0.38	24.15	378.8	0.114
72	14.66	33.73	5.61	0.41	50	18.60	33.75	5.53	0.37	24.19	375.9	0.190
94	13.46	33.68	5.38	0.60	75	14.53	33.72	5.60	0.42	25.11	289.0	0.273
143	10.42	33.80	3.30	1.62	100	12.85	33.68	5.21	0.84	25.42	259.3	0.341
191	10.82	34.14	2.10	2.00	150	10.40	33.83	3.03	1.68	25.99	205.8	0.457
279	8.48	34.22	1.75	2.39	200	10.50	34.16	2.02	2.06	26.23	184.4	0.555
371	7.52	34.25	1.28	2.60	250	8.88	34.21	1.84	2.31	26.54	155.3	0.640
548	6.26	34.34	0.44	2.97	300	8.23	34.23	1.66	2.46	26.65	145.0	0.714
825	4.80	34.45	0.45	3.15	400	7.29	34.26	1.10	2.67	26.82	130.4	0.852
1177	3.69	34.54	0.78	3.06	500	6.58	34.31	0.54	2.90	26.95	118.4	0.977
					600	5.94	34.37	0.45	3.04	27.09	106.8	1.089
					700	5.35	34.41	0.44	3.11	27.19	97.4	1.191
					800	4.89	34.44	0.45	3.14	27.27	90.5	1.285
					1000	4.18	34.50	0.57	3.12	27.39	79.3	1.455

CREST; November 12, 1949; 1007 GCT; 27°48'N, 119°14'W; sounding, 1,650 fm; wind, 360°, force 3; weather, missing; sea, missing; wire angle, 25°. 1106

0	19.58	33.96E	5.08	0.36	0	19.58	33.96	5.08	0.36	24.09	383.4	0.000
9	19.58	33.96	5.10	0.40	10	19.59	33.96	5.09	0.40	24.09	383.6	0.038
23	19.54	33.98	5.09	0.37	20	19.55	33.98	5.07	0.38	24.12	381.3	0.077
46	17.2	33.79	5.75	0.37	30	19.50	33.97	5.16	0.37	24.13	381.0	0.115
73	15.14	33.71	5.59	0.46	50	16.67	33.78	5.74	0.38	24.68	329.3	0.186
95	14.09	33.62	5.31	0.58	75	15.05	33.70	5.56	0.46	24.98	301.1	0.264
144	11.38	33.62	4.26	1.30	100	13.75	33.61	5.25	0.62	25.18	281.9	0.337
191	10.22	33.97	2.56	1.98	150	11.20	33.64	4.05	1.44	25.70	233.6	0.466
282	9.26	34.27	1.55	2.38	200	10.09	34.05	2.43	2.03	26.22	185.4	0.571
378	8.28	34.38	0.73	2.81	250	9.52	34.21	1.88	2.23	26.44	165.4	0.659
565	6.52	34.43	0.27	3.01	300	9.09	34.31	1.40	2.47	26.59	151.9	0.738
855	4.78	34.47	0.38	3.14	400	8.07	34.39	0.61	2.86	26.80	132.5	0.880
1112	3.90	34.54	0.62	3.17	500	7.11	34.42	0.32	2.96	26.97	117.6	1.005
					600	6.26	34.44	0.28	3.04	27.10	105.9	1.117
					700	5.55	34.45	0.30	3.09	27.20	97.1	1.218
					800	5.00	34.46	0.35	3.13	27.27	90.4	1.312
					1000	4.24	34.50	0.51	3.16	27.39	80.1	1.482

CREST; November 12, 1949; 0439 GCT; 27°27'N, 120°00'W; sounding, 2,200 fm; wind, 040°, force 2; weather, partly cloudy; sea, missing; wire angle, 0°. 1107

0	20.32	33.89E	5.34	0.37	0	20.32	33.89	5.34	0.37	23.85	406.1	0.000
10	20.34	33.89	4.63	0.34	10	20.34	33.89	4.63	0.34	23.85	407.2	0.041
25	20.31	33.95	4.82	0.34	20	20.33	33.94	4.73	0.34	23.89	403.8	0.081
50	20.2	33.64	5.51	0.34	30	20.30	33.94	4.95	0.34	23.90	403.2	0.121
80	13.19	33.51	5.18	0.64	50	20.22	33.64	5.51	0.34	23.69	423.4	0.204
105	11.58	33.53	4.25	1.17	75	13.55	33.52	5.28	0.57	25.16	284.0	0.293
160	9.87	33.89	3.33	1.86	100	11.80	33.52	4.38	1.05	25.50	251.8	0.360
214	9.20	34.07	2.18	2.14	150	10.06	33.85	3.50	1.79	26.06	198.7	0.472
316	8.06	34.31	1.08	2.66	200	9.36	34.03	2.44	2.07	26.32	175.1	0.566
424	7.05	34.31	0.55	2.91	250	8.76	34.17	1.74	2.32	26.53	156.2	0.648
630	5.56	34.33	0.37	3.13	300	8.22	34.29	1.23	2.58	26.70	140.4	0.722
939	4.30	34.34	0.54	3.18	400	7.26	34.32	0.62	2.87	26.87	125.6	0.855
1207	3.59	34.49	0.82	3.18	500	6.47	34.31	0.45	3.02	26.97	116.9	0.976
					600	5.75	34.32	0.37	3.11	27.07	108.1	1.089
					700	5.20	34.33	0.37	3.16	27.14	101.4	1.194
					800	4.77	34.33	0.43	3.18	27.19	97.1	1.293
					1000	4.11	34.36	0.60	3.18	27.29	88.7	1.479

E See footnote page 313.

SIO

CCOFI

4911

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

1108 CREST; November 11, 1949; 2336 GCT; 27°10'N, 120°29'W; sounding, 2,200 fm; wind, 040°, force 4; weather, partly cloudy; sea, high; wire angle, 11°.

0	19.68	33.89E	5.00	0.40	0	19.68	33.89	5.00	0.40	24.02	390.0	0.000
10	19.68	33.80	4.97	0.38	10	19.68	33.80	4.97	0.38	23.95	397.3	0.039
24	19.62	33.82	5.16	0.40	20	19.64	33.81	5.15	0.39	23.97	396.0	0.079
49	19.72	33.89	5.08	0.38	30	19.61	33.84	5.13	0.40	24.00	393.4	0.119
78	14.92	33.62	5.77	0.43	50	19.73	33.89	5.09	0.38	24.00	393.4	0.197
102	14.39	33.62	5.54	0.41	75	15.55	33.62	5.76	0.42	24.81	317.3	0.286
156	10.78	33.60	4.54	1.15	100	14.43	33.62	5.56	0.41	25.05	294.9	0.363
209	9.03	33.89	3.43	1.77	150	11.22	33.60	4.66	1.06	25.66	236.9	0.495
308	7.73	34.05	1.76	2.39	200	9.22	33.86	3.61	1.67	26.21	185.5	0.602
413	7.25	34.40	0.62	2.79	250	8.35	33.96	2.65	2.07	26.43	165.8	0.689
614	5.51	34.33	0.33	3.13	300	7.81	34.03	1.87	2.34	26.56	153.5	0.769
917	4.32	34.42	0.57	3.19	400	7.33	34.39	0.69	2.75	26.91	121.4	0.906
1182	3.60	34.49	0.80	3.23	500	6.49	34.37	0.40	3.00	27.01	112.7	1.023
					600	5.58	34.33	0.33	3.12	27.10	105.2	1.132
					700	5.10	34.35	0.35	3.16	27.17	98.6	1.234
					800	4.71	34.38	0.44	3.18	27.24	92.7	1.330
					1000	4.07	34.45	0.65	3.20	27.36	81.7	1.504

1109 CREST; November 11, 1949; 1557 GCT; 26°37'N, 121°06'W; sounding, 2,200 fm; wind, 020°, force 5; weather, partly cloudy; sea, high; wire angle, 12°.

0	19.65	33.82E	5.24	0.40	0	19.65	33.82	5.24	0.40	23.97	394.8	0.000
10	19.64	33.86	5.14	0.40	10	19.64	33.86	5.14	0.40	24.00	392.4	0.039
25	19.63	33.87	5.20	0.40	20	19.64	33.86	5.16	0.40	24.00	392.6	0.079
49	18.76	33.90	5.48	0.38	30	19.64	33.88	5.27	0.40	24.02	391.4	0.118
78	18.48	33.82	5.34	0.42	50	18.76	33.90	5.47	0.38	24.26	368.8	0.194
103	14.84	33.80	5.33	0.48	75	18.50	33.83	5.35	0.40	24.27	368.7	0.286
157	11.06	33.60	4.26	-	100	15.10	33.80	5.33	0.47	25.05	295.3	0.369
209	9.56	33.96	3.07	1.82	150	11.40	33.60	4.47	1.13	25.63	239.9	0.503
308	8.77	34.33	1.35	-	200	9.71	33.89	3.29	1.73	26.15	191.0	0.610
412	7.40	34.34	0.75	2.72	250	9.18	34.20	2.16	2.11	26.48	160.6	0.699
612	5.76	34.41	0.37	2.98	300	8.84	34.33	1.45	2.36	26.64	146.8	0.775
915	4.42	34.51	0.55	3.05	400	7.55	34.34	0.79	2.69	26.84	128.3	0.913
1277	3.38	34.56	0.96	2.99	500	6.57	34.36	0.51	2.86	27.00	114.5	1.034
					600	5.84	34.40	0.37	2.97	27.12	103.4	1.143
					700	5.27	34.45	0.40	3.00	27.23	93.4	1.241
					800	4.82	34.48	0.48	3.03	27.31	86.7	1.331
					1000	4.12	34.53	0.60	3.04	27.42	76.4	1.494

1110 CREST; November 11, 1949; 1013 GCT; 26°14'N, 121°44'W; sounding, 2,300 fm; wind, 340°, force 3; weather, cloudy; sea, missing; wire angle, 18°.

0	20.44	34.07E	5.04	0.40	0	20.44	34.07	5.04	0.40	23.96	396.4	0.000
10	20.44	34.07	5.17	0.40	10	20.44	34.07	5.17	0.40	23.96	396.8	0.040
24	20.40	34.07	5.18	0.38	20	20.41	34.07	5.17	0.39	23.96	396.8	0.079
48	20.33	34.05	5.15	0.38	30	20.36	34.07	5.16	0.38	23.98	395.2	0.119
76	19.72	34.07	5.44	0.38	50	20.32	34.05	5.15	0.38	23.98	396.3	0.198
100	15.17	33.78	5.34	0.52	75	19.71	34.07	5.42	0.38	24.15	380.6	0.295
153	11.72	33.57	4.75	1.04	100	15.17	33.78	5.34	0.52	25.01	298.3	0.380
205	9.86	33.98	2.95	1.90	150	11.90	33.57	4.80	1.01	25.52	250.9	0.517
306	8.42	34.27	1.34	2.41	200	9.94	33.95	3.16	1.84	26.16	190.4	0.627
412	7.16	34.31	0.66	2.86	250	9.20	34.16	1.93	2.21	26.45	164.0	0.717
615	5.62	34.39	0.36	3.11	300	8.50	34.26	1.38	2.40	26.64	146.7	0.794
923	4.34	34.49	0.58	3.19	400	7.29	34.31	0.73	2.82	26.86	126.6	0.931
1188	3.56	34.54	0.89	3.17	500	6.37	34.34	0.45	3.01	27.01	113.3	1.051
					600	5.71	34.38	0.36	3.10	27.12	103.2	1.159
					700	5.20	34.42	0.37	3.14	27.21	94.7	1.258
					800	4.78	34.46	0.45	3.17	27.29	87.7	1.349
					1000	4.08	34.51	0.67	3.19	27.41	77.4	1.514

E See footnote page 313.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	
CREST; November 8, 1949; 1516 GCT; 27°30'N, 115°18'W; sounding, 1,550 fm; wind, 330°, force 5; weather, cloudy; sea, high; wire angle, 28°.													1201
0	19.82	33.73E	5.28	0.31	0	19.82	33.73	5.28	0.31	23.85	406.2	0.000	
8	19.83	33.73	5.04	0.33	10	19.85	33.73	5.06	0.33	23.85	406.5	0.041	
21	17.91	33.64	5.58	0.36	20	18.50	33.64	5.57	0.36	24.13	380.6	0.080	
43	14.28	33.58	5.48	0.42	30	15.64	33.60	5.54	0.38	24.77	319.5	0.115	
68	13.70	33.80	2.83r	-	50	14.19	33.59	5.24	0.47	25.08	290.8	0.176	
88	12.77	33.75	3.33	1.40	75	13.39	33.79	3.95	1.14	25.40	261.3	0.245	
130	11.49	33.78	2.84	1.90	100	12.27	33.75	3.19	1.58	25.59	243.3	0.308	
169	11.18	34.11	2.32	2.13	150	11.29	33.98	2.58	2.03	25.95	210.0	0.422	
248	10.43	34.29	0.84	2.42	200	10.90	34.22	1.75	2.27	26.21	186.6	0.521	
329	8.62	34.29	0.78	2.52	250	10.40	34.29	0.84	2.43	26.35	174.2	0.610	
486	6.90	34.31	0.25	2.92	300	9.14	34.29	0.83	2.50	26.56	155.0	0.693	
740	5.04	34.45	0.40	2.87r	400	7.77	34.29	0.58	2.68	26.76	135.9	0.838	
1072	3.90[a]	34.38r	0.64	3.24	500	6.75	34.32	0.26	2.95	26.94	119.9	0.966	
					600	5.88	34.37	0.31	3.06	27.08	106.7	1.079	
					700	5.24	34.43	0.37	3.12	27.22	94.5	1.180	
					800	4.77	34.47	0.44	3.16	27.34	83.5	1.269	
					1000	4.09	(34.50)	0.58	3.21	(27.40)	(78.2)	(1.431)	
CREST; November 8, 1949; 2059 GCT; 27°06'N, 115°53'W; sounding, 2,075 fm; wind, 330°, force 5; weather, overcast; sea, rough; wire angle, 8°.													1202
0	19.73	33.68E	5.13	0.42	0	19.73	33.68	5.13	0.42	23.85	406.8	0.000	
10	19.64	33.75	5.18	0.43	10	19.64	33.75	5.18	0.43	23.93	399.7	0.040	
24	18.82	33.58	5.40	0.48	20	19.50	33.64	5.29	0.46	23.88	404.6	0.081	
48	13.97	33.48	5.73	0.62	30	17.75	33.54	5.52	0.52	24.24	370.6	0.119	
78	11.33	33.60	3.75	1.59	50	13.80	33.48	5.73	0.66	25.07	291.3	0.186	
102	10.17	33.77	2.67	2.09	75	11.50	33.58	4.25	1.48	25.60	241.7	0.252	
155	9.76	34.14	1.79	2.22	100	10.18	33.75	2.75	2.07	25.97	207.0	0.308	
208	9.40	34.20	1.21	2.42	150	9.79	34.11	1.87	2.21	26.31	175.3	0.404	
308	8.44	34.27	0.62	2.55	200	9.46	34.20	1.27	2.39	26.44	164.0	0.488	
413	7.27	34.36	0.46	2.86	250	9.06	34.22	0.88	2.50	26.52	157.2	0.568	
616	5.69	34.33	0.36	3.04	300	8.54	34.26	0.66	2.54	26.63	147.3	0.645	
922	4.25	34.33	0.54	3.02	400	7.40	34.36	0.47	2.83	26.88	124.6	0.781	
1287	3.32	34.45	0.93	2.93	500	6.47	34.36	0.40	2.97	27.01	113.1	0.900	
					600	5.79	34.33	0.38	3.04	27.07	107.9	1.010	
					700	5.22	34.32	0.39	3.04	27.13	102.4	1.116	
					800	4.73	34.32	0.45	3.04	27.19	97.3	1.215	
					1000	4.02	34.36	0.60	3.01	27.30	87.6	1.400	
CREST; November 9, 1949; 0259 GCT; 26°40'N, 116°28'W; sounding, 1,900 fm; wind, 340°, force 3; weather, partly cloudy; sea, rough; wire angle, 5°.													1203
0	19.80	33.80E	5.35	0.36	0	19.80	33.80	5.35	0.36	23.92	399.9	0.000	
10	19.81	33.79	5.03	0.35	10	19.81	33.79	5.03	0.35	23.91	400.9	0.040	
25	19.50	33.77	5.23	0.36	20	19.73	33.78	5.13	0.35	23.92	400.2	0.080	
50	17.74	33.66	5.62	-	30	19.23	33.76	5.35	0.38	24.04	389.7	0.120	
80	12.57	33.55	4.93	0.89	50	17.74	33.66	5.62	0.52	24.33	362.3	0.195	
105	10.52	33.71	3.47	1.62	75	13.22	33.55	5.15	0.80	25.25	275.4	0.274	
160	9.72	34.22	1.73	2.15	100	10.70	33.65	3.75	1.52	25.80	223.2	0.337	
214	9.46	34.35	1.04	2.47	150	9.77	34.16	1.98	2.08	26.35	171.2	0.436	
317	8.16	34.36	0.79	2.56	200	9.55	34.33	1.16	2.42	26.53	155.9	0.517	
426	7.00	34.39	0.47	2.70	250	9.12	34.35	0.84	2.52	26.61	148.4	0.593	
632	5.67	34.45	0.40	2.94	300	8.38	34.36	0.80	2.55	26.73	137.5	0.665	
942	4.24	34.52	0.57	3.04	400	7.22	34.38	0.55	2.67	26.92	120.5	0.794	
1208	3.52	34.58	0.85	2.93	500	6.47	34.41	0.40	2.79	27.05	109.5	0.909	
					600	5.85	34.44	0.40	2.91	27.15	100.5	1.014	
					700	5.33	34.46	0.41	2.97	27.23	93.3	1.111	
					800	4.84	34.49	0.46	3.01	27.31	86.1	1.200	
					1000	4.06	34.53	0.63	3.04	27.43	75.7	1.362	

a) Middle thermometer reading of 4.04° rejected.

E See footnote page 313.

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OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

1204 CREST; November 9, 1949; 0840 GCT; 26°16'N, 117°03'W; sounding, 2,250 fm; wind, 330°, force 2; weather, cloudy; sea, rough; wire angle, 8°.

0	19.80	33.95E	5.19	0.34	0	19.80	33.95	5.19	0.34	24.03	389.0	0.000
10	19.82	33.95	5.14	0.35	10	19.82	33.95	5.14	0.35	24.03	389.9	0.039
25	19.78	33.95	5.28	0.38	20	19.81	33.95	5.20	0.37	24.03	389.7	0.078
48	16.54	33.69	5.93	0.34	30	19.77	33.94	5.50	0.38	24.03	390.0	0.117
76	14.28	33.62	5.70	0.46	50	16.20	33.68	5.94	0.34	24.71	326.2	0.189
99	12.55	33.60	5.00	0.82	75	14.31	33.62	5.72	0.45	25.07	291.8	0.266
150	10.21	33.85	3.07	1.78	100	12.40	33.60	4.96	0.82	25.44	257.0	0.334
199	9.52	34.22	2.00	2.21	150	10.21	33.85	3.07	1.78	26.04	201.0	0.448
296	8.88	34.33	1.06	2.52	200	9.50	34.22	1.98	2.22	26.45	163.3	0.540
398	7.64	34.40	0.47	2.83	250	8.93	34.28	1.44	2.40	26.59	150.8	0.618
595	6.23	34.47	0.27	3.10	300	8.44	34.33	1.04	2.53	26.70	140.5	0.692
896	4.56	34.52	0.44	3.16	400	7.63	34.40	0.45	2.84	26.88	124.9	0.823
1160	3.72	34.58	0.75	3.20	500	6.88	34.45	0.35	3.02	27.02	112.3	0.942
					600	6.19	34.47	0.28	3.10	27.13	102.8	1.050
					700	5.54	34.48	0.30	3.13	27.22	94.7	1.148
					800	4.98	34.49	0.36	3.15	27.30	87.9	1.240
					1000	4.20	34.54	0.56	3.17	27.42	76.7	1.405

1205 CREST; November 9, 1949; 1410 GCT; 25°51'N, 117°35'W; sounding, 2,200 fm; wind, 340°, force 3; weather, cloudy; sea, rough; wire angle, 14°.

0	20.16	33.93E	4.51	0.38	0	20.16	33.93	4.51	0.38	23.92	399.8	0.000
10	20.16	33.93	4.41	0.14r	10	20.16	33.93	4.41	0.38	23.92	400.1	0.040
23	20.14	33.93	4.48	0.40	20	20.13	33.93	4.45	0.39	23.93	400.0	0.080
48	18.12	33.87	5.21	0.43	30	20.10	33.93	4.57	0.40	23.94	398.9	0.120
76	15.47	33.69	5.48	0.44	50	18.00	33.87	5.25	0.43	24.43	353.0	0.195
99	13.83	33.60	5.07	0.75	75	15.52	33.71	5.47	0.44	24.89	309.9	0.278
148	10.64	33.75	3.19	1.68	100	13.80	33.60	4.92	0.76	25.17	283.7	0.352
198	9.54	34.07	2.51	2.00	150	10.52	33.76	3.12	1.70	25.92	213.0	0.476
293	9.08	34.41	0.82	2.52	200	9.53	34.08	2.48	2.01	26.33	174.0	0.573
392	7.90	34.43	0.36	2.60	250	9.29	34.35	1.42	2.33	26.58	151.3	0.654
584	6.16	34.45	0.39	3.00	300	9.09	34.42	0.75	2.53	26.67	143.8	0.728
878	4.60	34.52	0.45	2.83r	400	7.80	34.43	0.37	2.61	26.88	125.3	0.862
1141	3.80	34.60	0.72	3.09	500	6.83	34.44	0.38	2.85	27.02	112.2	0.981
					600	6.05	34.45	0.39	3.01	27.13	102.3	1.088
					700	5.40	34.47	0.40	3.04	27.23	93.6	1.186
					800	4.92	34.50	0.42	3.06	27.31	86.4	1.276
					1000	4.20	34.56	0.55	3.08	27.44	75.2	1.438

1206 CREST; November 9, 1949; 2004 GCT; 25°26'N, 118°12'W; sounding, 2,250 fm; wind, 340°, force 3; weather, partly cloudy; sea, moderate; wire angle, 5°.

0	21.56	34.31E	5.10	0.32	0	21.56	34.31	5.10	0.32	23.84	407.7	0.000
10	21.30	34.30	5.10	0.36	10	21.30	34.30	5.10	0.36	23.90	402.1	0.040
25	21.23	34.29	5.07	0.37	20	21.25	34.29	5.06	0.36	23.91	401.9	0.081
50	19.35	34.06	5.59	0.40	30	21.21	34.28	5.10	0.37	23.91	402.0	0.121
79	15.41	33.70	5.77	0.45	50	19.35	34.06	5.59	0.40	24.23	371.4	0.198
103	13.98	33.61	5.42	0.58	75	15.61	33.72	5.76	0.44	24.87	311.2	0.284
157	11.34	33.96	2.68	1.83	100	14.10	33.61	5.59	0.52	25.11	288.9	0.359
210	9.96	34.23	1.88	2.24	150	11.60	33.90	2.90	1.74	25.83	221.3	0.486
310	8.90	34.42	0.88	2.59	200	10.07	34.20	2.00	2.19	26.34	174.0	0.585
414	7.77	34.45	0.40	2.90	250	9.53	34.33	1.40	2.40	26.53	156.6	0.667
615	5.96	34.49	0.25	3.14	300	9.01	34.41	0.94	2.56	26.67	143.5	0.742
920	4.40	34.52	0.45	3.22	400	7.92	34.45	0.43	2.86	26.88	125.5	0.877
1187	3.60	34.58	0.76	3.21	500	6.90	34.47	0.27	3.04	27.04	111.0	0.995
					600	6.06	34.49	0.25	3.13	27.16	99.5	1.100
					700	5.41	34.50	0.29	3.17	27.25	91.6	1.196
					800	4.88	34.51	0.36	3.20	27.32	85.1	1.284
					1000	4.13	34.54	0.51	3.22	27.43	75.8	1.446

E See footnote page 313.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

CREST; November 10, 1949; 0114 GCT; 25°01'N, 118°48'W; sounding, 2,300 fm; wind, 020°, force 3; weather, low fog; sea, rough; wire angle, 5°. 1207

0	20.89	34.02E	5.13	0.38	0	20.89	34.02	5.13	0.38	23.80	411.6	0.000	
10	20.58	34.00	4.87	0.39	10	20.58	34.00	4.87	0.39	23.87	405.4	0.041	
25	20.58	34.00	5.10	0.40	20	20.59	34.00	4.96	0.40	23.86	405.9	0.081	
50	18.21	33.83	5.69	0.38	30	20.59	33.99	5.36	0.40	23.86	406.9	0.122	
80	15.54	33.75	5.63	0.42	50	18.21	33.83	5.69	0.38	24.34	361.0	0.199	
105	14.86	33.78	5.45	0.50	75	15.67	33.75	5.64	0.40	24.88	310.2	0.283	
159	11.20	33.63	3.85	1.38	100	15.00	33.78	5.50	0.47	25.05	294.8	0.358	
212	9.52	33.98	-	2.03	150	11.85	33.64	4.11	1.22	25.58	244.8	0.493	
315	8.82	34.33	1.14	2.51	200	9.63	33.89	2.90	1.92	26.17	189.6	0.602	
423	7.76	34.38	0.50	2.74	250	9.21	34.19	1.98	2.26	26.47	161.8	0.690	
629	5.98	34.41	0.30	2.98	300	8.92	34.31	1.29	2.47	26.61	149.4	0.767	
938	4.37	34.49	0.46	3.05	400	8.00	34.38	0.56	2.70	26.81	131.9	0.908	
1205	3.44	34.54	0.91	3.00	500	7.03	34.39	0.35	2.85	26.96	118.7	1.033	
					600	6.17	34.40	0.30	2.96	27.08	107.6	1.146	
					700	5.53	34.43	0.31	3.01	27.18	98.3	1.249	
					800	4.99	34.46	0.37	3.03	27.27	90.2	1.343	
					1000	4.13	34.50	0.51	3.04	27.40	78.7	1.512	

CREST; November 10, 1949; 0611 GCT; 24°37'N, 119°21'W; sounding, 2,300 fm; wind, variable, force 1; weather, partly cloudy; sea, moderate; wire angle, 5°. 1208

0	21.35	34.40E	5.14	0.35	0	21.35	34.40	5.14	0.35	23.96	395.8	0.000	
10	21.23	34.40	5.05	0.38	10	21.23	34.40	5.05	0.38	23.99	393.2	0.039	
25	21.19	34.39	5.13	0.35	20	21.20	34.40	5.11	0.36	24.00	392.6	0.079	
50	21.20	34.39	5.12	0.38	30	21.19	34.39	5.14	0.35	24.00	393.5	0.118	
80	17.48	34.02	5.72	0.40	50	21.20	34.39	5.12	0.38	24.00	394.3	0.197	
104	15.6	33.89	5.65	0.42	75	18.05	34.05	5.69	0.40	24.55	342.0	0.289	
157	11.94	33.62	4.50	1.14	100	15.95	33.92	5.68	0.41	24.95	304.6	0.370	
209	10.05	34.08	2.75	1.98	150	12.61	33.64	4.75	1.02	25.44	259.1	0.510	
308	8.90	34.37	0.96	2.64	200	10.21	33.90	2.97	1.89	26.08	198.3	0.625	
412	7.82	34.43	0.40	2.91	250	9.50	34.28	1.78	2.32	26.49	159.8	0.715	
612	5.86	34.45	0.44	3.05	300	8.96	34.36	1.06	2.60	26.65	146.2	0.791	
915	4.44	34.54	0.51	3.14	400	7.95	34.43	0.42	2.89	26.86	127.4	0.928	
1182	3.68	34.58	0.91	3.14	500	6.93	34.44	0.41	3.00	27.01	113.7	1.048	
					600	5.95	34.45	0.45	3.05	27.15	101.0	1.156	
					700	5.33	34.47	0.46	3.08	27.24	92.7	1.253	
					800	4.87	34.51	0.49	3.12	27.32	85.0	1.341	
					1000	4.17	34.55	0.55	3.14	27.43	75.5	1.502	

CREST; November 10, 1949; 1140 GCT; 24°11'N, 119°56'W; sounding, 2,300 fm; wind, 170°, force 2; weather, cloudy; sea, moderate; wire angle, 5°. 1209

0	21.79	34.51E	4.98	0.40	0	21.79	34.51	4.98	0.40	23.92	399.4	0.000	
10	21.81	34.38	4.92	0.40	10	21.81	34.38	4.92	0.40	23.82	409.6	0.040	
25	21.78	34.51	4.98	0.36	20	21.79	34.45	4.94	0.36	23.88	404.5	0.081	
50	21.81	34.49	4.99	0.43	30	21.79	34.51	4.98	0.36	23.92	400.5	0.121	
80	17.66	34.00	5.88	0.21r	50	21.81	34.49	4.99	0.43	23.90	403.1	0.202	
105	16.6	33.89	5.27	0.48	75	18.25	34.04	5.87	0.46	24.50	347.3	0.296	
159	12.94	33.73	4.44	1.05	100	16.75	33.91	5.46	0.48	24.76	323.0	0.379	
212	9.88	33.91	3.10	1.90	150	13.98	33.74	4.55	0.92	25.24	278.3	0.530	
314	8.72	34.31	1.01	2.70	200	10.09	33.82	3.50	1.71	26.04	202.4	0.650	
420	7.75	34.33	0.50	2.96	250	9.39	34.17	2.00	2.30	26.43	166.3	0.741	
625	6.07	34.33	0.29	3.22	300	8.86	34.30	1.15	2.64	26.61	149.1	0.821	
936	4.47	34.51r	0.47	3.26	400	7.90	34.33	0.55	2.92	26.78	134.2	0.962	
1205	3.66	34.52	0.89	3.25	500	7.05	34.33	0.36	3.08	26.91	123.5	1.091	
					600	6.25	34.35	0.30	3.20	27.03	112.5	1.209	
					700	5.57	34.38	0.31	3.24	27.15	102.4	1.316	
					800	5.04	34.41	0.37	3.26	27.23	94.6	1.415	
					1000	4.25	34.48	0.52	3.26	27.37	81.6	1.591	

E See footnote page 313.

S10

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1210

CREST; November 10, 1949; 1743 GCT; 23°52'N, 120°30'W; sounding, 2,300 fm; wind, variable, force 1; weather, partly cloudy; sea, moderate; wire angle, 0°.

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
0	22.24	34.51E	5.02	0.42	0	22.24	34.51	5.02	0.42	23.80	411.5	0.000
10	22.12	34.43	5.00	0.43	10	22.12	34.43	5.00	0.43	23.77	414.2	0.041
15	21.90r	34.49	5.11	0.40	20	22.12	34.50	5.10	0.40	23.83	409.5	0.082
40	22.11	34.51	5.08	0.40	30	22.11	34.51	5.08	0.40	23.84	409.0	0.123
70	18.56	33.91	5.71	0.43	50	21.25	34.19	5.28	0.40	23.83	410.2	0.205
95	16.8	33.73	5.62	0.52	75	17.75	33.86	5.69	0.44	24.48	348.7	0.300
150	12.36	33.66	3.96	1.22	100	16.38	33.71	5.56	0.58	24.69	329.4	0.385
205	10.44	34.13	2.38	2.04	150	12.36	33.66	3.96	1.22	25.50	252.9	0.531
308	8.94	34.40	1.10	2.56	200	10.53	34.08	2.50	1.97	26.16	190.7	0.641
416	7.74	34.34	0.45	2.96	250	9.68	34.34	1.65	2.32	26.51	158.3	0.728
624	5.98	34.42	0.28	3.16	300	9.03	34.40	1.16	2.54	26.66	144.5	0.804
937	4.39	34.43	0.52	3.31	400	7.89	34.35	0.51	2.92	26.80	132.6	0.943
1203	3.62[a]	34.51	0.80	3.30	500	6.93	34.36	0.30	3.08	26.95	119.6	1.069
					600	6.12	34.41	0.28	3.14	27.09	106.2	1.182
					700	5.51	34.42	0.35	3.21	27.18	98.7	1.284
					800	4.97	34.42	0.42	3.26	27.24	92.9	1.380
					1000	4.18	34.44	0.56	3.31	27.34	83.8	1.557

a) Middle thermometer reading of 3.85° rejected.

E See footnote page 313.

OBSERVED					INTERPOLATED					COMPUTED			
Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m	
U. S. S. SERRANO; March 3, 1949; 0122 GCT; 38°55'N, 124°04'W; sounding, 900 fm; wind, 015°, force 5; weather, partly cloudy; sea, moderate; wire angle, 45°[a], 35°.													201
0[b]	10.89	33.48			0	10.89	33.48			25.63	237.	0.0000	
24	10.35	33.41			10	10.67	33.45			25.66	235.	0.0236	
47	10.09	-			20	10.43	33.42			25.67	234.	0.0470	
66	9.47	33.84			30	10.30	33.47			25.73	228.	0.0701	
93	9.33	33.73			50	10.00	33.68			25.94	208.	0.1137	
182	8.50	33.97			75	9.42	33.80			26.13	191.	0.1635	
183	8.67	-			100	9.27	33.75			26.12	192.	0.2114	
220	8.35	33.97			150	9.03	33.89			26.27	179.	0.3043	
250	8.18	-			200	8.50	33.97			26.41	166.	0.3906	
259	7.95	-			250	8.18	34.00			26.48	160.	0.4721	
304	7.53	34.04			300	7.59	34.04			26.60	149.	0.5494	
321	7.43	34.05			400	6.90	34.09			26.74	137.	0.6927	
338	7.29	34.06			500	6.29	34.16			26.87	125.	0.8241	
375	7.08	-			600	5.69	34.22			27.00	114.	0.9440	
492	6.32	34.15			700	5.19	(34.28)			(27.10)	(105.)	(1.0535)	
666	5.32	34.26			800	4.80	(34.32)			(27.18)	(98.)	(1.1548)	
862	4.59	-			900	(4.48)	(34.35)			-	-	-	
U. S. S. SERRANO; March 4, 1949; 0145 GCT; 38°53'N, 126°26'W; sounding, 2,250 fm; wind, 160°, force 4; weather, cloudy; sea, moderate; wire angle, 5°, 0°.													202
0	10.61	32.70			0	10.61	32.70			25.08	290.	0.0000	
25	9.82	32.69			10	10.31	32.70			25.13	285.	0.0287	
50	9.68	32.71			20	9.91	32.69			25.19	279.	0.0569	
75	9.23	32.77			30	9.79	32.69			25.21	278.	0.0847	
100	9.17	32.92			50	9.68	32.71			25.24	275.	0.1399	
200	7.72	33.84			75	9.23	32.77			25.36	264.	0.2073	
300	6.53	34.08			100	9.17	32.92			25.49	252.	0.2718	
350	6.04	34.06			150	8.46	33.38			25.96	211.	0.3877	
370	5.80	34.07			200	7.72	33.84			26.43	164.	0.4815	
400	5.59	34.05			250	7.16	33.99			26.62	146.	0.5591	
422	5.42	34.07			300	6.53	34.08			26.78	132.	0.6286	
480	5.24	34.24			400	5.59	34.05			26.87	123.	0.7562	
531	4.96	34.16			500	5.14	34.13			26.99	113.	0.8747	
586	4.78	34.19			600	4.71	34.20			27.10	104.	0.9835	
798	4.05	34.29			700	4.38	34.25			27.17	97.	1.0840	
1012	3.56	34.40			800	4.04	34.29			27.24	91.	1.1785	
1229	3.06	34.47			1000	3.60	34.40			27.37	80.	1.3493	
					1200	3.10	34.47			27.47	70.	1.4991	
U. S. S. SERRANO; March 5, 1949; 0035 GCT; 42°25'N, 126°44'W; sounding, 1,440 fm; wind, 060°, force 2; weather, cloudy; sea, slight; wire angle, 15°.													203
0	9.56	32.72			0	9.56	32.72			25.27	271.	0.0000	
98	8.05	33.46			10	9.42	32.80			25.35	263.	0.0267	
195	7.42	34.06			20	9.29	32.87			25.43	256.	0.0527	
294	6.65	34.08			30	9.18	32.95			25.51	249.	0.0780	
393	6.01	33.95			50	8.79	33.10			25.69	233.	0.1021	
493	5.47	34.19			75	8.31	33.29			25.91	212.	0.1579	
594	4.88	34.12			100	8.04	33.47			26.09	195.	0.2087	
846	4.10	34.40			150	7.69	33.88			26.46	160.	0.2975	
1106	3.46	34.41			200	7.40	34.06			26.65	143.	0.3734	
					250	7.00	34.07			26.71	138.	0.4438	
					300	6.63	34.08			26.77	133.	0.5116	
					400	5.99	34.13			26.89	123.	0.6394	
					500	5.42	34.19			27.01	112.	0.7582	
					600	4.87	34.26			27.13	101.	0.8648	
					700	4.59	34.33			27.21	94.	0.9622	
					800	4.28	34.39			27.29	87.	1.0523	
					1000	3.70	34.41			27.37	80.	1.2189	
					1200	(3.21)	(34.41)			(27.42)	(76.)	(1.3747)	

a) On all SERRANO double casts, first wire angle is for deep cast, second angle for shallow cast.
b) On Cruises II and III, observed depths of double casts are interspersed in order of depth.

USNEL

CRUISE II

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

204 U. S. S. SERRANO; March 6, 1949; 0118 GCT; 45°00'N, 129°13'W; sounding, 2,250 fm; wind, 285°, force 3; weather, overcast; sea, slight; wire angle, 15°, 0°.

0	8.89	32.55	0	8.89	32.55	25.24	274.	0.0000
25	7.91	32.55	10	8.50	32.55	25.30	269.	0.0271
51	7.77	32.57	20	8.04	32.55	25.37	262.	0.0536
76	7.80	32.65	30	7.87	32.55	25.39	260.	0.0797
102	7.24	33.22	50	7.77	32.57	25.42	257.	0.1367
203	6.54	33.86	75	7.80	32.65	25.48	252.	0.2003
305	5.73	34.01	100	7.24	33.19	25.98	205.	0.2574
355	5.59	34.04	150	6.91	33.53	26.30	176.	0.3524
390	5.55	34.08	200	6.58	33.84	26.58	149.	0.4335
406	5.34	34.09	250	6.21	33.94	26.71	137.	0.5050
440	5.26	34.07	300	5.78	34.01	26.81	129.	0.5715
488	4.94	34.13	400	5.42	34.09	26.93	118.	0.6950
537	4.80	34.14	500	4.90	34.13	27.02	110.	0.8092
586	4.52	34.19	600	4.47	34.20	27.12	101.	0.9148
784	4.04	34.28	700	4.20	34.24	27.18	96.	1.0132
985	3.42	34.36	800	4.00	34.28	27.23	91.	1.1068
1185	3.01	34.42	1000	3.39	34.36	27.36	80.	1.2782
			1200	(3.00)	(34.43)	(27.45)	(72.)	(1.4302)

205 U. S. S. SERRANO; March 7, 1949; 0135 GCT; 44°59'N, 134°19'W; sounding, 2,130 fm; wind, 060°, force 1; weather, overcast; sea, smooth; wire angle, 7°, 0°.

0	8.33	32.70	0	8.33	32.70	25.44	255.	0.0000
25	8.05	32.68	10	8.24	32.69	25.45	254.	0.0254
50	7.89	32.68	20	8.10	32.68	25.46	253.	0.0508
75	7.67	32.71	30	8.00	32.68	25.48	252.	0.0760
100	7.51	32.67	50	7.89	32.68	25.49	251.	0.1262
199	7.10	32.88	75	7.67	32.71	25.55	246.	0.1882
296	6.50	33.89	100	7.51	32.67	25.54	247.	0.2497
342	5.51	33.91	150	7.27	32.77	25.65	237.	0.3706
394	5.02	33.95	200	7.10	32.89	25.78	226.	0.4864
402	4.95	33.95	250	6.85	33.33	26.15	191.	0.5882
453	4.60	34.02	300	6.44	33.89	26.64	145.	0.6721
504	4.41	34.02	400	4.98	33.95	26.87	124.	0.8063
554	4.17	34.09	500	4.40	34.02	26.99	113.	0.9244
605	4.01	34.17	600	4.01	34.16	27.14	99.	1.0301
808	3.58	34.28	700	3.80	34.24	27.22	91.	1.1250
1011	3.14	34.32	800	3.58	34.28	27.28	87.	1.2138
1214	2.81	34.41	1000	3.13	34.32	27.35	80.	1.3806
			1200	2.83	34.40	27.44	72.	1.5330

206 U. S. S. SERRANO; March 7, 1949; 1545 GCT; 45°00'N, 137°04'W; sounding, 2,200 fm; wind, 170°, force 1; weather, overcast; sea, slight; wire angle, 13°, 12°.

0	8.06	32.71	0	8.06	32.71	25.49	250.	0.0000
25	7.84	32.70	10	8.00	32.71	25.50	249.	0.0250
50	7.77	32.69	20	7.87	32.70	25.51	249.	0.0499
74	7.69	32.69	30	7.83	32.70	25.52	248.	0.0747
101	7.41	32.72	50	7.77	32.69	25.52	248.	0.1243
202	6.34	33.67	75	7.69	32.69	25.53	248.	0.1863
305	5.68	33.87	100	7.41	32.72	25.59	242.	0.2476
356	5.15	33.89	150	6.90	33.16	26.01	203.	0.3586
406	4.80	33.95	200	6.34	33.66	26.47	159.	0.4491
406	4.75	33.95	250	6.02	33.80	26.62	145.	0.5251
457	4.56	34.00	300	5.70	33.87	26.71	138.	0.5961
509	4.30	34.06	400	4.87	33.94	26.87	123.	0.7261
560	4.12	34.08	500	4.36	34.05	27.02	110.	0.8434
612	3.98	34.12	600	3.99	34.11	27.10	102.	0.9491
817	3.55	34.25	700	3.79	34.18	27.18	95.	1.0481
1025	3.27	34.34	800	3.57	34.24	27.25	90.	1.1401
1230	2.85	34.37	1000	3.31	34.33	27.34	81.	1.3101
			1200	2.92	34.44	27.47	71.	1.4621

U. S. S. SERRANO; March 8, 1949; 0016 GCT; 45°47.5'N, 137°00'W; sounding, 2,260 fm; wind, 090°, force 3; weather, overcast; sea, slight; wire angle, 20°, 14°. 207

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
0	7.72	32.68			0	7.72	32.68			25.51	248.	0.0000
25	7.33	32.67			10	7.53	32.67			25.54	246.	0.0247
51	7.25	32.69			20	7.40	32.67			25.55	244.	0.0492
69	7.17	32.70			30	7.32	32.67			25.56	243.	0.0736
103	7.10	32.69			50	7.25	32.69			25.59	241.	0.1221
206	6.70	33.71			75	7.14	32.70			25.61	239.	0.1821
311	5.65	33.83			100	7.11	32.69			25.61	240	0.2421
362	5.13	33.81			150	6.93	33.15			25.99	204.	0.3531
378	4.95	33.91			200	6.72	33.65			26.41	165.	0.4456
428	4.65	33.95			250	6.36	33.76			26.55	153.	0.5251
474	4.79	33.90			300	5.82	33.82			26.67	142.	0.5986
477	4.44	34.04			400	4.79	33.91			26.86	124.	0.7316
526	4.22	34.05			500	4.37	34.04			27.01	111.	0.8486
566	4.06	34.06			600	3.93	34.07			27.08	105.	0.9566
781	3.56	34.16			700	3.74	34.12			27.13	99.	1.0586
993	3.15	34.37			800	3.51	34.17			27.20	94.	1.1556
1214	2.83	34.45			1000	3.14	34.37			27.39	77.	1.3256
					1200	2.84	34.44			27.48	69.	1.4716

U. S. S. SERRANO; March 8, 1949; 1555 GCT; 48°09'N, 137°04'W; sounding, 2,060 fm; wind, 080°, force 2; weather, overcast; sea, slight; wire angle, 12°, 5°. 208

0	6.94	32.68			0	6.94	32.68			25.62	237.	0.0000
25	6.58	32.69			10	6.90	32.68			25.63	237.	0.0237
50	6.45	32.71			20	6.75	32.69			25.66	234.	0.0473
75	6.29	32.71			30	6.63	32.70			25.68	232.	0.0706
100	6.19	32.70			50	6.45	32.71			25.69	232.	0.1169
201	5.77	33.77			75	6.29	32.71			25.73	228.	0.1744
301	4.84	33.83			100	6.19	32.70			25.74	228.	0.2314
351	4.61	33.91			150	6.00	33.23			26.18	186.	0.3349
402	4.36	33.95			200	5.77	33.77			26.63	144.	0.4174
406	4.46	33.93			250	5.39	33.80			26.70	138.	0.4879
457	4.23	33.97			300	4.84	33.83			26.79	130.	0.5549
508	4.08	34.05			400	4.43	33.95			26.93	117.	0.6789
558	3.97	34.09			500	4.09	34.04			27.04	108.	0.7909
609	3.88	34.12			600	3.89	34.12			27.12	100.	0.8949
813	3.38	34.23			700	3.67	34.17			27.18	95.	0.9929
1015	3.01	34.31			800	3.41	34.22			27.25	89.	1.0849
1218	2.71	34.41			1000	3.02	34.30			27.35	81.	1.2549
					1200	2.72	34.40			27.45	71.	1.4069

U. S. S. SERRANO; March 9, 1949; 0020 GCT; 48°53.5'N, 137°00'W; sounding, 2,050 fm; wind, 100°, force 2; weather, cloudy; sea, slight; wire angle, 8°, 0°. 209

0	6.89	32.62			0	6.89	32.62			25.58	241.	0.0000
25	6.18	32.63			10	6.60	32.63			25.63	237.	0.0239
50	5.93	32.62			20	6.27	32.63			25.67	233.	0.0474
76	5.77	32.65			30	6.16	32.63			25.68	232.	0.0706
98	5.47	32.66			50	5.93	32.62			25.71	230.	0.1168
201	5.31	33.78			75	5.77	32.65			25.75	226.	0.1738
300	4.53	33.87			100	5.47	32.66			25.79	222.	0.2298
350	4.30	33.86			150	5.36	33.23			26.25	179.	0.3301
400	4.16	33.96			200	5.31	33.77			26.69	139.	0.4095
402	4.17	33.95			250	5.07	33.84			26.77	131.	0.4769
452	4.04	33.96			300	4.53	33.87			26.85	123.	0.5405
502	3.96	34.06			400	4.16	33.96			26.96	114.	0.6585
552	3.86	34.07			500	3.96	34.06			27.06	105.	0.7675
602	3.76	34.14			600	3.76	34.14			27.15	97.	0.8685
803	3.36	34.25			700	3.55	34.20			27.22	91.	0.9625
1004	2.98	-			800	3.37	34.25			27.28	86.	1.0515
1205	2.71	34.40			1000	2.99	34.33			27.37	78.	1.2155
					1200	2.71	34.40			27.46	71.	1.3735

USNEL

CRUISE II

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

210 U. S. S. SERRANO; March 9, 1949; 1549 GCT; 51°12'N, 137°10.5'W; sounding, 1,950 fm; wind, 030°, force 2; weather, partly cloudy; sea, slight; wire angle, 20°, 15°.

0	5.28	32.68	0	5.28	32.68	25.83	218.	0.0000
26	4.97	32.70	10	5.09	32.70	25.86	214.	0.0216
52	4.97	32.66	20	5.00	32.70	25.88	214.	0.0430
78	4.87	32.72	30	4.97	32.69	25.87	214.	0.0644
104	4.85	32.73	50	4.97	32.66	25.85	216.	0.1073
155	5.40	33.24	75	4.88	32.72	25.91	211.	0.1608
207	5.22	33.74	100	4.86	32.73	25.91	211.	0.2136
259	4.90	33.79	150	5.35	33.13	26.18	186.	0.3126
286	4.84	33.90	200	5.34	33.73	26.66	141.	0.3946
306	4.72	33.92	250	4.95	33.78	26.73	134.	0.4636
333	4.41	33.89	300	4.74	33.92	26.87	122.	0.5276
382	4.29	33.91	400	4.26	33.94	26.94	116.	0.6466
477	4.06	34.05	500	4.00	34.06	27.06	105.	0.7576
572	3.86	34.09	600	3.81	34.12	27.13	99.	0.8596
756	3.50	34.23	700	3.61	34.25	27.25	88.	0.9536
951	3.12	34.33	800	3.45	34.29	27.30	84.	1.0396
1144	2.78	34.36	1000	3.05	34.34	27.38	78.	1.2016
			1200	(2.69)	(34.37)	(27.43)	(72.)	(1.3516)

211 U. S. S. SERRANO; March 10, 1949; 0017 GCT; 51°57.5'N, 136°59'W; sounding, 1,950 fm; wind, 010°, force 3; weather, partly cloudy; sea, moderate; wire angle, 33°, 25°.

0	5.28	32.68	0	5.28	32.68	25.83	218.	0.0000
25	4.98	32.84	10	5.14	32.68	25.85	216.	0.0217
50	4.91	32.66	20	5.01	32.68	25.86	215.	0.0433
76	4.73	32.65	30	4.97	32.67	25.86	216.	0.0648
101	4.65	32.66	50	4.91	32.66	25.86	216.	0.1080
154	6.15	33.61	75	4.73	32.65	25.87	215.	0.1618
206	5.85	33.80	100	4.65	32.66	25.89	213.	0.2153
255	5.51	33.93	150	5.95	33.52	26.41	164.	0.3093
271	5.24	33.95	200	5.89	33.78	26.63	145.	0.3868
297	5.09	-	250	5.55	33.93	26.79	130.	0.4553
318	4.92	33.97	300	5.07	33.96	26.87	123.	0.5183
365	4.72	33.98	400	4.54	34.00	26.96	115.	0.6373
459	4.39	34.03	500	4.29	34.06	27.03	108.	0.7493
556	4.14	34.09	600	4.07	34.12	27.06	106.	0.8563
754	3.63	34.22	700	3.80	34.18	27.18	96.	0.9573
962	3.23	34.37	800	3.52	34.25	27.26	88.	1.0493
1161	2.84	34.40	1000	3.17	34.38	27.40	76.	1.2133
			1200	(2.75)	(34.41)	(27.46)	(71.)	(1.3593)

212 U. S. S. SERRANO; March 10, 1949; 1549 GCT; 54°19'N, 137°03'W; sounding, 1,620 fm; wind, 010°, force 3; weather, overcast; sea, moderate; wire angle, 9°, 13°.

0	4.72	32.83	0	4.72	32.83	26.01	201.	0.0000
23	4.48	32.81	10	4.61	32.82	26.01	200.	0.0200
49	4.35	32.70	20	4.50	32.81	26.02	200.	0.0400
73	4.69	32.91	30	4.43	32.79	26.01	201.	0.0600
98	5.22	33.48	50	4.35	32.70	25.95	207.	0.1007
149	5.95	33.81	75	4.70	32.91	26.15	188.	0.1502
200	5.44	33.86	100	5.23	33.52	26.50	155.	0.1932
250	5.01	33.87	150	5.95	33.81	26.65	142.	0.2672
300	4.77	33.95	200	5.44	33.86	26.74	133.	0.3357
331	4.50	33.96	250	5.01	33.87	26.80	128.	0.4012
386	4.42	34.11	300	4.77	33.95	26.89	120.	0.4632
441	4.34	34.10	400	4.40	34.11	27.06	105.	0.5762
552	4.07	34.25	500	4.22	34.18	27.13	99.	0.6782
662	3.67	34.23	600	3.89	34.24	27.22	91.	0.7732
883	3.22	34.33	700	3.57	34.24	27.25	89.	0.8632
1103	2.85	34.40	800	3.37	34.29	27.31	84.	0.9492
1324	2.57	34.62	1000	3.02	34.36	27.40	75.	1.1072
			1200	2.73	34.47	27.51	66.	1.2472

U. S. S. SERRANO; March 11, 1949; 0016 GCT; 55°06'N, 137°03'W; sounding, 1,480 fm; wind, 010°, force 3; weather, overcast; sea, slight; wire angle, 23°, 23°. 213

OBSERVED Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	INTERPOLATED Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	COMPUTED σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m
0	4.33	32.73			0	4.33	32.73			25.97	204.	0.0000
25	4.10	32.83			10	4.21	32.75			26.00	202.	0.0203
50	4.03	32.72			20	4.14	32.81			26.05	197.	0.0402
77	3.95	32.69			30	4.10	32.83			26.07	195.	0.0598
104	3.81	-			50	4.03	32.72			26.00	202.	0.0994
154	4.75	33.68			75	3.95	32.69			25.98	204.	0.1502
202	4.56	33.76			100	3.82	32.66			25.97	205.	0.2014
250	4.83	34.01			150	4.70	33.68			26.68	138.	0.2874
288	4.69	-			200	4.56	33.75			26.76	132.	0.3549
336	4.53	34.14			250	4.83	34.01			26.93	116.	0.4169
384	4.44	34.20			300	4.64	34.08			27.01	109.	0.4729
482	4.07	34.18			400	4.40	34.19			27.12	99.	0.5769
590	3.90	34.27			500	4.03	34.19			27.16	96.	0.6749
783	3.48	34.30			600	3.90	34.27			27.24	89.	0.7679
976	3.06	34.36			700	3.69	34.29			27.28	86.	0.8559
1196	2.78	34.59			800	3.43	34.30			27.31	84.	0.9409
					1000	3.01	34.38			27.41	74.	1.0989
					1200	(2.73)	(34.69)			(27.68)	(50.)	(1.2229)

U. S. S. SERRANO; March 11, 1949; 1150 GCT; 56°51'N, 136°13.5'W; sounding, 760 fm; wind, 320°, force 4; weather, cloudy; sea, moderate; wire angle, 27°, 25°. 214

0	5.17	32.46			0	5.17	32.46			25.67	233.	0.0000
25	5.16	32.48			10	5.17	32.47			25.68	233.	0.0233
49	5.14	32.47			20	5.17	32.48			25.68	232.	0.0465
75	5.07	32.54			30	5.15	32.48			25.68	232.	0.0697
101	5.08	32.56			50	5.14	32.47			25.68	232.	0.1161
154	6.46	33.42			75	5.07	32.54			25.74	228.	0.1735
206	6.60	33.77			100	5.08	32.56			25.76	226.	0.2300
259	5.88	33.82			150	6.45	33.42			26.27	178.	0.3308
288	5.70	33.87			200	6.58	33.72			26.49	158.	0.4147
313	5.70	33.89			250	5.97	33.81			26.64	144.	0.4902
337	5.53	33.93			300	5.70	33.88			26.73	136.	0.5595
386	5.40	33.95			400	5.35	33.95			26.82	128.	0.6916
484	4.97	33.98			500	4.93	33.99			26.90	121.	0.8161
581	4.70	34.04			600	4.65	34.05			26.98	114.	0.9337
776	4.15	34.13			700	4.36	34.10			27.05	108.	1.0418
975	3.56	34.26			800	4.07	34.15			27.12	102.	1.2466
1189	2.97	34.42			1000	3.49	34.28			27.29	87.	1.4356
					1200	(2.92)	(34.43)			(27.46)	(71.)	(1.5938)

U. S. S. SERRANO; March 11, 1949; 1458 GCT; 56°51'N, 136°04'W; sounding, 450 fm; wind, 320°, force 4; weather, overcast; sea, moderate; wire angle, 30°. 215

0	4.56	32.21			0	4.56	32.21			25.54	246.	0.0000
24	5.11	32.51			10	4.79	32.29			25.58	242.	0.0244
48	5.07	32.54			20	5.00	32.47			25.69	231.	0.0480
98	5.32	32.80			30	5.10	32.52			25.72	228.	0.0709
149	5.65	33.22			50	5.07	32.54			25.74	226.	0.1163
202	6.70	33.77			75	5.20	32.56			25.74	227.	0.1729
303	5.60	33.89			100	5.32	32.59			25.75	226.	0.2294
405	5.42	33.94			150	5.65	33.25			26.24	181.	0.3310
452	5.28	33.95			200	6.69	33.77			26.51	156.	0.4151
					250	6.18	33.84			26.64	145.	0.4901
					300	5.61	33.89			26.75	134.	0.5598
					400	5.42	33.94			26.81	129.	0.6917
					500	(5.10)	(33.96)			(26.86)	(125.)	(0.8190)

USNEL

CRUISE II

	OBSERVED					INTERPOLATED					COMPUTED		
	Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
	m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
216	U. S. S. SERRANO; March 11, 1949; 1618 GCT; 56°51'N, 135°57.5'W; sounding, 110 fm; wind, 320°, force 4; weather, overcast; sea, moderate; wire angle, 15°.												
	0	4.56	32.15			0	4.56	32.15			25.49	250.	0.0000
	10	4.42	32.23			10	4.42	32.23			25.57	243.	0.0245
	25	5.10	32.23			20	4.97	32.23			25.52	248.	0.0491
	50	4.96	32.61			30	5.09	32.24			25.51	249.	0.0740
	75	4.88	32.90			50	4.96	32.61			25.81	220.	0.1209
	100	5.43	32.99			75	4.88	32.90			26.05	198.	0.1731
	125	5.49	33.11			100	5.43	32.99			26.06	197.	0.2225
	150	5.59	33.11			150	5.59	33.11			26.13	191.	0.3194
217	U. S. S. SERRANO; March 14, 1949; 1552 GCT; 56°56'N, 136°33'W; sounding, 1,000 fm; wind, 080°, force 1; weather, clear; sea, smooth; wire angle, 12°, 5°.												
	0	5.11	32.55			0	5.11	32.55			25.75	226.	0.0000
	25	5.09	32.60			10	5.10	32.57			25.76	224.	0.0225
	50	5.09	32.66			20	5.10	32.59			25.78	223.	0.0448
	75	4.83	32.73			30	5.09	32.61			25.80	221.	0.0670
	100	5.95	33.22			50	5.09	32.66			25.84	218.	0.1111
	150	6.60	33.92			75	4.83	32.73			25.92	210.	0.1635
	200	6.30	-			100	5.95	33.22			26.18	186.	0.2130
	250	6.02	33.94			150	6.60	33.92			26.64	143.	0.2927
	297	5.69	33.91			200	6.30	33.93			26.69	139.	0.3630
	300	5.70	33.94			250	6.02	33.94			26.74	135.	0.4214
	346	5.42	33.95			300	5.70	33.94			26.77	132.	0.4881
	394	5.14	33.97			400	5.13	33.97			26.87	124.	0.6159
	494	4.70	34.04			500	4.68	34.04			26.97	114.	0.7349
	592	4.42	34.09			600	4.41	34.09			27.04	109.	0.8465
	790	4.01	34.17			700	4.20	34.17			27.13	101.	0.9515
	980	3.42	34.32			800	3.97	34.24			27.21	94.	1.0490
	1177	3.10	34.36			1000	3.39	34.33			27.34	82.	1.2254
						1200	(3.05)	(34.36)			(27.39)	(78.)	(1.3862)
218	U. S. S. SERRANO; March 15, 1949; 0014 GCT; 57°07'N, 138°00'W; sounding, 1,610 fm; wind, 040°, force 2; weather, clear; sea, slight; wire angle, 25°, 10°.												
	0	4.72	32.61			0	4.72	32.61			25.84	217.	0.0000
	27	4.21	32.62			10	4.53	32.61			25.86	215.	0.0216
	52	4.16	32.67			20	4.29	32.62			25.89	212.	0.0430
	79	3.89	32.71			30	4.20	32.63			25.91	211.	0.0641
	105	4.28	32.95			50	4.16	32.67			25.94	208.	0.1060
	159	5.71	33.88			75	3.92	32.70			25.99	203.	0.1473
	213	5.46	33.89			100	4.04	32.86			26.10	193.	0.1968
	266	5.10	33.90			150	5.51	33.87			26.74	133.	0.2778
	271	5.15	33.93			200	5.52	33.89			26.76	132.	0.3438
	319	4.91	-			250	5.20	33.90			26.80	128.	0.4088
	323	4.84	33.95			300	4.99	33.93			26.85	124.	0.4718
	368	4.73	33.99			400	4.61	34.01			26.96	115.	0.5908
	467	4.37	34.05			500	4.25	34.07			27.04	107.	0.7018
	551	4.13	34.14			600	4.00	34.17			27.15	98.	0.8048
	746	3.72	34.24			700	3.80	34.21			27.20	93.	0.9008
	945	3.19	34.33			800	3.60	34.26			27.26	88.	0.9918
	1150	2.84	34.39			1000	3.10	34.35			27.38	78.	1.1578
						1200	(2.74)	(34.40)			(27.45)	(71.)	(1.3078)

U. S. S. SERRANO; March 15, 1949; 1550 GCT; 57°28'N, 142°23.5'W; sounding, 1,980 fm; wind, 030°, force 2; weather, clear; sea, slight; wire angle, 15°. 219

OBSERVED Z m	T °C	S ‰	O_2 ml/L	PO_4-P µg at/L	INTERPOLATED Z m	T °C	S ‰	O_2 ml/L	PO_4-P µg at/L	COMPUTED σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m
0	2.89	32.77			0	2.89	32.77			26.14	188.	0.0000
25	2.78	32.76			10	2.85	32.77			26.14	188.	0.0188
51	2.75	32.77			20	2.80	32.76			26.14	188.	0.0376
76	2.86	32.80			30	2.78	32.76			26.14	188.	0.0564
102	4.56	33.60			50	2.75	32.77			26.15	187.	0.0940
152	4.31	33.81			75	2.86	32.80			26.17	186.	0.1407
203	4.23	33.87			100	4.40	33.56			26.62	143.	0.1819
253	4.04	33.95			150	4.31	33.80			26.82	125.	0.2490
299	4.04	33.97			200	4.23	33.86			26.88	120.	0.3102
301	4.00	33.99			250	4.04	33.94			26.96	112.	0.3682
350	3.97	34.11			300	4.01	33.99			27.00	109.	0.4235
400	3.91	34.11			400	3.91	34.11			27.11	100.	0.5278
501	3.81	34.13			500	3.81	34.13			27.14	98.	0.6267
600	3.54	34.18			600	3.54	34.18			27.20	92.	0.7227
800	3.15	34.30			700	3.32	34.23			27.27	86.	0.8119
1009	2.82	34.38			800	3.15	34.30			27.33	81.	0.8953
1215	2.58	34.42			1000	2.85	34.38			27.43	73.	1.0485
					1200	2.59	34.42			27.48	68.	1.1891

U. S. S. SERRANO; March 16, 1949; 0013 GCT; 58°14'N, 142°03'W; sounding, 1,920 fm; wind, 315°, force 2; weather, clear; sea, slight; wire angle, 18°, 6°. 220

0	3.50	32.63			0	3.50	32.63			25.98	204.	0.0000
26	3.20	32.71			10	3.31	32.66			26.01	200.	0.0202
52	3.17	32.81			20	3.26	32.69			26.04	197.	0.0401
78	2.95	32.86			30	3.21	32.72			26.07	195.	0.0597
104	5.29	33.68			50	3.19	32.80			26.14	189.	0.0980
155	4.79	33.76			75	2.96	32.86			26.21	182.	0.1425
207	4.47	33.94			100	5.24	33.67			26.62	144.	0.1833
259	4.23	33.93			150	4.82	33.75			26.73	134.	0.2528
305	4.48	33.96			200	4.49	33.93			26.91	118.	0.3158
311	4.44	33.95			250	4.23	33.93			26.93	115.	0.3738
356	4.36	34.05			300	4.50	33.95			26.92	117.	0.4318
407	4.25	34.04			400	4.25	34.04			27.02	109.	0.5448
510	3.91	34.10			500	3.94	34.09			27.09	102.	0.6508
614	3.65	34.19			600	3.70	34.18			27.19	104.	0.7538
824	3.26	34.30			700	3.49	34.23			27.25	88.	0.8498
1033	2.88	-			800	3.30	34.28			27.30	84.	0.9358
1245	2.61	34.44			1000	2.93	34.37			27.41	74.	1.0938
					1200	2.67	34.40			27.48	68.	1.2358

U. S. S. SERRANO; March 16, 1949; 1544 GCT; 59°25'N, 144°50.5'W; sounding, 750 fm; wind, 120°, force 1; weather, clear; sea, smooth; wire angle, 37°, 13°. 221

0	4.44	32.56			0	4.44	32.56			25.83	218.	0.0000
25	4.23	32.47			10	4.33	32.52			25.81	220.	0.0219
51	4.13	32.56			20	4.25	32.47			25.78	223.	0.0441
77	3.96	32.64			30	4.20	32.47			25.78	223.	0.0664
103	4.48	32.92			50	4.13	32.55			25.85	216.	0.1101
154	5.76	33.45			75	3.97	32.64			25.94	208.	0.1631
207	5.90	33.89			100	4.45	32.91			26.10	193.	0.2132
234	5.72	33.86			150	4.68	33.39			26.46	160.	0.3013
251	5.66	33.86			200	5.89	33.88			26.70	137.	0.3755
272	5.40	33.88			250	5.66	33.86			26.72	137.	0.4439
295	5.25	33.87			300	5.24	33.90			26.80	129.	0.5103
309	5.23	33.93			400	4.51	33.94			26.91	119.	0.6343
382	4.63	33.94			500	4.19	34.00			26.99	112.	0.7496
455	4.24	33.95			600	4.10	34.09			27.07	105.	0.8580
605	4.11	34.10			700	3.90	34.16			27.15	98.	0.9596
735	3.80	34.18			800	3.64	34.22			27.23	92.	1.0546
866	3.54	34.25										

USNEL

CRUISE II

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

222 U. S. S. SERRANO; March 17, 1949; 0013 GCT; 58°40'N, 144°45'W; sounding, 2,010 fm; wind, 080°, force 1; weather, clear; sea, smooth; wire angle, 5°, 8°.

0	2.89	32.74	0	2.89	32.74	26.13	190.	0.0000
25	2.57	32.76	10	2.71	32.75	26.14	189.	0.0189
50	2.43	32.83	20	2.60	32.76	26.15	187.	0.0376
75	3.58	33.33	30	2.50	32.77	26.17	185.	0.0562
100	4.48	33.80	50	2.43	32.83	26.23	180.	0.0929
150	4.26	33.97	75	3.58	33.33	26.52	152.	0.1344
200	4.00	33.95	100	4.48	33.80	26.81	126.	0.1692
250	4.00	33.95	150	4.26	33.97	26.96	112.	0.2287
300	3.97	33.96	200	4.00	33.95	26.97	111.	0.2842
305	3.98	33.99	250	4.00	33.95	26.97	112.	0.3397
355	3.83	34.04	300	3.97	33.96	26.99	111.	0.3952
406	3.80	34.13	400	3.81	34.12	27.13	98.	0.4992
508	3.61	34.26	500	3.62	34.25	27.25	87.	0.5912
609	3.45	34.31	600	3.46	34.31	27.31	82.	0.6752
812	3.10	34.39	700	3.38	34.35	27.35	78.	0.7552
1015	2.76	34.42	800	3.14	34.39	27.41	74.	0.8312
1218	2.50	34.41	1000	2.79	34.42	27.46	69.	0.9732
			1200	2.55	34.41	27.48	68.	1.1112

223 U. S. S. SERRANO; March 17, 1949; 1543 GCT; 57°47'N, 147°16'W; sounding, 2,560 fm; wind, 040°, force 2; weather, cloudy; sea, slight; wire angle, 32°, 13°.

0	2.78	32.67	0	2.78	32.67	26.07	195.	0.0000
25	3.30	32.64	10	3.08	32.65	26.03	199.	0.0197
52	3.23	32.84	20	3.26	32.64	26.00	201.	0.0397
80	4.90	33.41	30	2.90	32.65	26.04	198.	0.0596
106	5.39	33.78	50	3.16	32.75	26.10	192.	0.0986
160	4.79	33.87	75	4.80	33.39	26.44	160.	0.1426
213	4.70	33.95	100	5.36	33.64	26.58	148.	0.1811
266	4.23	33.99	150	4.85	33.85	26.80	127.	0.2498
271	4.13	33.96	200	4.72	33.93	26.88	120.	0.3116
317	4.04	34.04	250	4.37	33.97	26.95	114.	0.3701
319	4.04	34.00	300	4.08	34.01	27.01	108.	0.4255
364	4.11	34.23	400	4.04	34.15	27.13	98.	0.5285
455	3.92	34.20	500	3.89	34.21	27.19	93.	0.6240
549	3.79	34.22	600	3.75	34.24	27.23	90.	0.7154
739	3.56	34.33	700	3.62	34.30	27.29	85.	0.8027
922	2.99	34.37	800	3.39	34.34	27.35	80.	0.8851
1108	2.74	34.44	1000	2.87	34.39	27.43	72.	1.0373
			1200	(2.65)	(34.48)	(27.52)	(64.)	(1.1737)

224 U. S. S. SERRANO; March 18, 1949; 0014 GCT; 57°42.5'N, 148°36'W; sounding, 1,540 fm; wind, 040°, force 2; weather, overcast; sea, slight; wire angle, 43°, 20°.

0	3.61	32.48	0	3.61	32.48	25.84	216.	0.0000
26	3.37	32.64	10	3.61	32.55	25.90	211.	0.0214
51	2.86	32.70	20	3.50	32.61	25.96	206.	0.0422
78	4.09	32.99	30	3.06	32.65	26.03	199.	0.0625
110	5.76	33.60	50	2.86	32.70	26.09	194.	0.1017
155	4.89	33.74	75	4.00	32.97	26.20	184.	0.1489
206	5.09	33.95	100	5.21	33.53	26.51	154.	0.1914
225	4.96	33.95	150	4.96	33.72	26.69	138.	0.2644
257	4.65	33.96	200	5.06	33.94	26.85	123.	0.3296
262	4.54	33.97	250	4.72	33.95	26.90	119.	0.3901
297	4.43	33.96	300	4.44	33.99	26.96	114.	0.4482
300	4.46	34.02	400	4.17	34.06	27.05	106.	0.5580
375	4.25	34.04	500	3.82	34.13	27.14	98.	0.6601
448	3.99	34.09	600	3.54	34.19	27.21	92.	0.7549
589	3.57	34.18	700	3.32	34.24	27.27	86.	0.8436
745	3.29	34.27	800	3.20	34.29	27.32	82.	0.9274
895	3.03	34.33	1000	(2.86)	(34.36)	(27.41)	(74.)	(1.0831)
			1200	(2.62)	(34.39)	(27.45)	(71.)	(1.2281)

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

U. S. S. SERRANO; March 19, 1949; 1544 GCT; 57°00'N, 150°00'W; sounding, 1,000 fm; wind, 060°, force 3; weather, light rain showers; sea, moderate; wire angle, 43°, 20°. 225

0	2.89	32.86	0	2.89	32.86	26.21	182.	0.0000
27	2.84	32.87	10	2.88	32.87	26.22	181.	0.0181
53	2.87	32.87	20	2.85	32.87	26.22	180.	0.0362
82	3.43	33.06	30	2.84	32.87	26.22	180.	0.0542
110	4.71	33.63	50	2.84	32.87	26.22	181.	0.0903
163	4.46	33.81	75	3.18	32.99	26.29	175.	0.1347
213	4.18	33.91	100	4.73	33.62	26.34	142.	0.1718
268	3.97	33.96	150	4.53	33.78	26.78	129.	0.2395
321	3.99	33.99	200	4.24	33.89	26.90	118.	0.3011
			250	4.00	33.95	26.97	111.	0.3584
			300	3.98	33.98	27.00	109.	0.4135

U. S. S. SERRANO; March 20, 1949; 0013 GCT; 56°12'N, 150°00'W; sounding, 2,700 fm; wind, 090°, force 3; weather, light rain; sea, rough; wire angle, 38°, 32°. 226

0	2.89	32.83	0	2.89	32.83	26.19	184.	0.0000
24	2.79	32.84	10	2.83	32.83	26.19	183.	0.0184
48	2.65	32.88	20	2.80	32.84	26.20	182.	0.0367
74	2.52	33.03	30	2.77	32.85	26.21	181.	0.0549
99	4.00	33.44	50	2.64	32.89	26.26	177.	0.0908
149	4.56	33.85	75	2.52	33.05	26.39	165.	0.1336
197	4.28	33.91	100	4.00	33.45	26.62	144.	0.1721
244	4.14	33.96	150	4.56	33.85	26.84	124.	0.2379
266	4.06	34.00	200	4.27	33.91	26.91	117.	0.2980
296	4.00	34.03	250	4.13	33.97	26.98	111.	0.3550
308	4.00	34.04	300	4.00	34.03	27.04	106.	0.4092
360	3.90	34.07	400	3.86	34.11	27.12	99.	0.5116
473	3.67	34.19	500	3.62	34.20	27.21	91.	0.6064
572	3.49	34.24	600	3.46	34.25	27.27	86.	0.6947
777	3.13	34.33	700	3.30	34.30	27.32	81.	0.7784
992	2.76	34.39	800	3.10	34.34	27.37	77.	0.8575
1223	2.55	34.47	1000	2.74	34.39	27.44	71.	1.0053
			1200	2.60	34.46	27.51	65.	1.1413

U. S. S. SERRANO; March 20, 1949; 1544 GCT; 53°53'N, 149°54'W; sounding, 2,260 fm; wind, 020°, force 3; weather, overcast; sea, rough; wire angle, 30°, 20°. 227

0	3.11	32.92	0	3.11	32.92	26.24	179.	0.0000
26	3.05	32.91	10	3.08	32.91	26.24	179.	0.0179
50	3.07	32.92	20	3.06	32.91	26.24	179.	0.0358
77	2.88	33.01	30	3.05	32.91	26.24	179.	0.0537
103	3.92	33.75	50	3.07	32.92	26.24	179.	0.0895
148	3.94	34.00	75	2.89	32.99	26.32	172.	0.1333
213	3.87	33.99	100	3.80	33.70	26.79	127.	0.1707
266	3.83	34.12	150	3.94	34.00	27.02	106.	0.2289
319	3.72	34.10	200	3.90	34.00	27.02	106.	0.2819
323	3.75	34.10	250	3.85	34.08	27.09	100.	0.3334
378	3.64	34.13	300	3.77	34.11	27.12	98.	0.3828
435	3.57	34.16	400	3.61	34.14	27.16	94.	0.4786
546	3.39	34.23	500	3.46	34.20	27.23	89.	0.5702
656	3.24	34.32	600	3.33	34.28	27.30	83.	0.6559
879	2.87	34.38	700	3.20	34.34	27.36	77.	0.7356
1104	2.56	34.42	800	3.02	34.36	27.39	75.	0.8114
1337	2.47	34.51	1000	2.70	34.40	27.45	70.	0.9556
			1200	2.50	34.45	27.51	65.	1.1100

USNEL

CRUISE II

OBSERVED					INTERPOLATED					COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m

228 U. S. S. SERRANO; March 21, 1949; 0012 GCT; 53°05'N, 150°00'W; sounding, 2,450 fm; wind, 280°, force 3; weather, light rain showers; sea, rough; wire angle, 2°.

0	3.33	32.79	0	3.33	32.79	26.12	191.	0.0000
27	3.16	32.81	10	3.27	32.79	26.12	191.	0.0190
53	3.06	32.83	20	3.19	32.80	26.14	189.	0.0379
82	3.19	33.07	30	3.13	32.81	26.15	187.	0.0567
110	3.99	33.69	50	3.07	32.83	26.17	185.	0.0940
166	3.95	33.94	75	3.00	32.98	26.30	174.	0.1389
221	3.90	33.96	100	3.75	33.46	26.61	144.	0.1788
276	3.82	34.04	150	3.98	33.93	26.96	112.	0.2428
324	3.75	34.08	200	3.92	33.95	26.98	110.	0.2982
326	3.77	34.08	250	3.90	34.01	27.03	106.	0.3521
383	3.69	34.11	300	3.80	34.06	27.08	101.	0.4033
439	3.61	34.17	400	3.68	34.13	27.15	96.	0.5019
555	3.42	34.23	500	3.51	34.20	27.22	90.	0.5945
667	3.26	34.30	600	3.34	34.26	27.28	84.	0.6813
892	2.88	34.38	700	3.21	34.31	27.34	80.	0.7631
1116	2.60	34.46	800	3.04	34.34	27.38	76.	0.8400
1338	2.35	34.49	1000	2.74	34.42	27.47	68.	0.9846
			1200	2.51	34.47	27.53	64.	1.1162

229 U. S. S. SERRANO; March 21, 1949; 1549 GCT; 50°45'N, 150°00'W; sounding, 2,500 fm; wind, 170°, force 2; weather, light rain showers; sea, very rough; wire angle, 35°, 20°.

0	4.56	32.68	0	4.56	32.68	25.91	210.	0.0000
22	4.43	32.67	10	4.49	32.67	25.91	210.	0.0210
43	4.48	32.69	20	4.44	32.67	25.91	210.	0.0420
66	4.47	32.69	30	4.46	32.68	25.92	209.	0.0640
88	4.36	32.68	50	4.50	32.69	25.92	209.	0.1059
135	3.96	33.48	75	4.41	32.68	25.92	209.	0.1582
182	3.97	33.74	100	4,28	32.69	25.95	208.	0.2103
229	3.91	33.78	150	3.96	33.63	26.72	134.	0.2957
271	3.87	33.87	200	3.97	33.75	26.82	125.	0.3606
279	3.84	33.89	250	3.90	33.81	26.87	121.	0.4221
319	3.79	-	300	3.80	33.91	26.96	113.	0.4805
367	3.78	33.96	400	3.74	34.01	27.05	105.	0.5895
465	3.64	34.12	500	3.61	34.15	27.17	94.	0.6892
567	3.52	34.20	600	3.50	34.23	27.25	88.	0.7803
752	3.22	34.32	700	3.31	34.29	27.31	82.	0.8653
960	2.84	34.36	800	3.17	34.33	27.36	79.	0.9457
1178	2.61	34.44	1000	2.82	34.37	27.42	73.	1.0975
			1200	(2.58)	(34.45)	(27.51)	(65.)	(1.2357)

230 U. S. S. SERRANO; March 22, 1949; 0014 GCT; 50°08'N, 150°10'W; sounding, 2,550 fm; wind, 240°, force 3; weather, cloudy; sea, rough; wire angle, 44°, 10°.

0	4.83	32.64	0	4.83	32.64	25.85	216.	0.0000
29	4.52	32.65	10	4.73	32.64	25.86	215.	0.0216
58	4.48	32.66	20	4.61	32.65	25.88	213.	0.0430
86	4.38	32.66	30	4.52	32.65	25.89	213.	0.0643
115	4.10	32.78	50	4.49	32.66	25.90	211.	0.1067
173	3.82	33.66	75	4.43	32.66	25.91	211.	0.1595
231	3.78	33.80	100	4.29	32.70	25.95	207.	0.2117
254	3.78	33.82	150	3.90	33.32	26.48	157.	0.3026
289	3.79	33.91	200	3.80	33.73	26.82	125.	0.3731
296	3.76	33.91	250	3.78	33.82	26.89	119.	0.4341
336	3.76	33.99	300	3.76	33.92	26.97	112.	0.4917
337	3.76	33.98	400	3.71	34.06	27.09	101.	0.5981
417	3.69	34.07	500	3.59	34.13	27.16	96.	0.6964
499	3.59	34.13	600	3.49	34.17	27.20	92.	0.7903
696	3.30	34.22	700	3.30	34.22	27.26	87.	0.8801
859	2.98	34.36	800	3.11	34.31	27.35	79.	0.9634
1070	2.74	34.43	1000	2.82	34.41	27.42	74.	1.1164
			1200	(2.55)	(34.45)	(27.51)	(65.)	(1.2556)

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	
U. S. S. SERRANO; March 22, 1949; 1544 GCT; 49°58'N, 146°30'W; sounding, 2,240 fm; wind, 190°, force 2; weather, drizzle; sea, slight; wire angle, 25°, 23°.													231
0	5.83	32.63			0	5.83	32.63			25.72	228.	0.0000	
24	5.90	32.61			10	5.88	32.61			25.70	230.	0.0229	
48	5.86	32.63			20	5.89	32.61			25.70	230.	0.0459	
72	5.59	32.61			30	5.89	32.62			25.71	229.	0.0689	
96	5.52	32.61			50	5.85	32.63			25.72	229.	0.1147	
143	5.13	32.99			75	5.58	32.61			25.74	227.	0.1717	
192	4.36	33.63			100	5.51	32.61			25.75	227.	0.2284	
241	4.31	33.73			150	5.09	33.08			26.17	187.	0.3318	
279	4.15	33.84			200	4.31	33.65			26.71	136.	0.4126	
291	4.08	33.85			250	4.29	33.74			26.78	130.	0.4792	
330	4.01	33.92			300	4.04	33.86			26.90	119.	0.5414	
378	3.93	33.96			400	3.90	33.98			27.01	109.	0.6554	
474	3.85	34.04			500	3.79	34.07			27.09	102.	0.7611	
570	3.59	34.16			600	3.50	34.18			27.21	92.	0.8580	
767	3.30	34.29			700	3.40	34.26			27.28	85.	0.9465	
976	2.95	34.36			800	3.23	34.30			27.32	82.	1.0303	
1181	2.67	34.40			1000	2.91	34.36			27.40	75.	1.1875	
					1200	(2.61)	(34.40)			(27.46)	(70.)	(1.3339)	
U. S. S. SERRANO; March 23, 1949; 1544 GCT; 52°35'N, 146°23'W; sounding, 2,210 fm; wind, 240°, force 6; weather, light rain; sea, moderate; wire angle, 50°, 35°.													232
0	4.11	32.76			0	4.11	32.76			26.02	200.	0.0000	
25	4.00	32.78			10	4.07	32.77			26.03	199.	0.0199	
52	3.66	32.87			20	4.02	32.77			26.04	198.	0.0398	
79	3.43	32.98			30	3.96	32.79			26.06	196.	0.0595	
107	3.42	33.15			50	3.71	32.87			26.15	188.	0.0980	
158	3.72	33.67			75	3.44	32.96			26.24	179.	0.1439	
211	3.77	33.86			100	3.42	33.10			26.35	169.	0.1873	
246	3.75	33.87			150	3.68	33.60			26.73	134.	0.2628	
259	3.73	33.95			200	3.77	33.80			26.88	120.	0.3261	
290	3.73	33.95			250	3.73	33.91			26.97	112.	0.3839	
302	3.74	34.00			300	3.74	33.98			27.02	107.	0.4385	
335	3.76	34.00			400	3.67	34.08			27.11	99.	0.5415	
426	3.61	34.11			500	3.53	34.13			27.16	95.	0.6386	
516	3.51	34.14			600	3.44	34.19			27.22	90.	0.7312	
703	3.21	34.25			700	3.21	34.25			27.29	84.	0.8184	
878	2.96	34.33			800	3.02	34.29			27.34	80.	0.9002	
1053	2.67	34.42			1000	2.79	34.39			27.44	71.	1.0512	
					1200	(2.35)	(34.49)			(27.56)	(60.)	(1.1830)	
U. S. S. SERRANO; March 28, 1949; 2317 GCT; 38°41'N, 137°04'W; sounding, 2,250 fm; wind, 210°, force 2; weather, overcast; sea, slight; wire angle, 30°, 25°.													233
0	13.17	33.31			0	13.17	33.31			25.07	290.	0.0000	
23	12.88	33.36			10	13.06	33.36			25.13	284.	0.0287	
45	12.82	33.40			20	13.00	33.36			25.15	283.	0.0571	
70	12.64	33.39			30	12.92	33.36			25.16	282.	0.0854	
185	9.32	33.71			50	12.79	33.40			25.22	277.	0.1414	
276	8.24	33.99			75	12.60	33.39			25.25	275.	0.2104	
320	7.48	33.99			100	12.54	33.43			25.29	272.	0.2788	
364	6.80	33.96			150	10.40	33.57			25.79	225.	0.4029	
408	6.40	33.93			200	9.15	33.78			26.16	190.	0.5066	
453	5.76	33.92			250	8.53	33.95			26.39	169.	0.5963	
499	5.28	33.94			300	7.89	33.99			26.52	157.	0.6778	
545	4.92	33.95			400	6.48	33.93			26.67	144.	0.8283	
728	4.13	34.09			500	5.28	33.94			26.83	129.	0.9645	
913	3.63	34.23			600	4.63	33.99			26.94	119.	1.0882	
1100	3.24	34.37			700	4.21	34.07			27.05	109.	1.2017	
					800	3.90	34.15			27.14	100.	1.3059	
					1000	3.42	34.30			27.31	85.	1.4907	
					1200	(3.08)	(34.43)			(27.45)	(73.)	(1.6483)	

USNEL

CRUISE II
CRUISE III

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

234 U. S. S. SERRANO; March 29, 1949; 2317 GCT; 38°20'N, 132°29'W; sounding, 2,640 fm; wind, 240°, force 2; weather, partly cloudy; sea, slight; wire angle, 15°, 17°.

0	12.89	33.12	0	12.89	33.12	24.98	299.	0.0000
24	12.39	33.12	10	12.67	33.12	25.02	295.	0.0297
49	11.85	33.03	20	12.50	33.12	25.06	292.	0.0590
73	11.80	33.14	30	12.26	33.10	25.09	289.	0.0881
98	12.07	33.13	50	11.84	33.03	25.11	287.	0.1457
195	8.26	33.63	75	11.81	33.14	25.20	279.	0.2165
294	7.16	33.99	100	12.05	33.13	25.15	285.	0.2882
345	6.55	33.97	150	9.18	33.30	25.78	225.	0.4157
399	6.14	-	200	8.19	33.66	26.22	184.	0.5181
464	5.48	34.02	250	7.63	33.94	26.52	156.	0.6033
517	5.11	34.01	300	7.09	33.99	26.63	146.	0.6789
569	4.80	34.08	400	6.14	33.99	26.73	135.	0.8192
620	4.68	34.11	500	5.23	34.01	26.90	122.	0.9475
822	4.08	34.27	600	4.72	34.10	27.02	111.	1.0641
1034	3.44	34.36	700	4.46	34.21	27.13	101.	1.1703
1231	3.03	34.43	800	4.15	34.28	27.22	93.	1.2674
			1000	3.57	34.35	27.35	83.	1.4434
			1200	3.07	34.42	27.44	73.	1.5996

235 U. S. S. SERRANO; March 30, 1949; 2315 GCT; 36°36'N, 128°10'W; sounding, 2,490 fm; wind, 300°, force 6; weather, cloudy; sea, very rough; wire angle, 60°, 58°.

0	11.94	32.92	0	11.94	32.92	25.01	296.	0.0000
23	11.92	32.90	10	11.93	32.91	25.00	297.	0.0296
46	11.89	32.91	20	11.92	32.90	25.00	298.	0.0593
68	11.89	32.90	30	11.90	32.90	25.00	298.	0.0891
91	11.44	32.95	50	11.89	32.91	25.01	297.	0.1485
185	9.10	33.64	75	11.89	32.90	25.00	298.	0.2229
280	8.04	33.95	100	11.15	32.98	25.20	280.	0.2952
306	7.60	34.02	150	9.76	33.33	25.71	232.	0.4232
329	7.52	34.02	200	8.92	33.74	26.17	189.	0.5285
348	7.39	34.07	250	8.31	33.89	26.38	170.	0.6183
381	7.04	34.05	300	7.82	33.98	26.52	157.	0.7000
389	7.06	34.08	400	6.90	34.08	26.73	138.	0.8476
431	6.65	34.10	500	6.11	34.14	26.88	124.	0.9788
468	6.33	34.13	600	5.52	34.18	26.99	115.	1.0985
612	5.48	34.19	700	5.00	34.28	27.13	102.	1.1971
760	4.76	34.35	800	4.59	34.37	27.24	92.	1.2951
904	4.14	34.40	1000	(3.79)	(34.42)	(27.37)	(80.)	(1.4671)
			1200	(3.17)	(34.45)	(27.45)	(72.)	(1.6197)

301 U. S. S. SERRANO; May 15, 1949; 2248 GCT; 28°18'N, 117°30'W; sounding, missing; wind, 290°, force 2; weather, cloudy; sea, moderate; wire angle, 30°, 30°.

0	16.83	33.66	5.72	0	16.83	33.66	5.72	24.55	340.	0.0000
24	16.40	33.66	5.72	10	16.61	33.66	5.72	24.60	335.	0.0338
48	16.11	33.68	5.79	20	16.45	33.66	5.72	24.64	332.	0.0672
96	14.31	33.58	5.74	30	16.32	33.67	5.74	24.67	329.	0.1002
193	10.54	33.67	3.07	50	16.10	33.68	5.79	24.73	324.	0.1654
293	8.89	34.12	1.87	75	15.38	33.65	5.78	24.87	311.	0.2448
396	7.65	34.22	1.16	100	13.50	33.58	5.73	25.21	279.	0.3186
501	6.98	34.27	0.33	150	11.53	33.59	4.19	25.60	243.	0.4490
546	6.51	34.36	0.27	200	10.41	33.68	2.95	25.87	218.	0.5641
553	6.60	34.28	0.29	250	9.52	33.94	2.28	26.23	185.	0.6648
598	6.14	34.41	0.29	300	8.81	34.13	1.82	26.49	161.	0.7513
650	5.90	34.37	0.21	400	7.61	34.22	1.12	26.74	138.	0.9006
701	5.42	34.38	0.28	500	6.98	34.27	0.33	26.87	127.	1.0328
752	5.29	34.40	0.26	600	6.14	34.41	0.28	27.09	106.	1.1493
802	5.03	34.45	0.33	700	5.42	34.38	0.28	27.16	100.	1.2526
1004	4.24	34.48	0.51	800	5.03	34.45	0.32	27.26	91.	1.3483
1512	2.99	34.55	1.10	1000	4.26	34.48	0.50	27.37	82.	1.4347
				1200	3.63	34.51	0.68	27.46	73.	1.5897
				1500	3.00	34.54	1.08	27.54	66.	1.7985

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	
U. S. S. SERRANO; May 17, 1949; 0012 GCT; 25°30'N, 118°12'W; sounding, 2,150 fm; wind, 270°, force 4; weather, overcast; sea, slight; wire angle, 35°, 25°.													302
0	18.16	34.01	5.39	0.31	0	18.16	34.01	5.39		24.50	345.	0.0000	
27	18.16	34.01	5.30	0.35	10	18.16	34.01	5.33		24.50	345.	0.0345	
55	16.61	33.95	5.49	0.31	20	18.16	34.01	5.30		24.50	345.	0.0690	
110	13.38	33.56	-	0.77	30	18.14	34.00	5.32		24.49	346.	0.1036	
219	9.89	34.28	1.41		50	16.90	33.96	5.47		24.76	321.	0.1703	
333	8.63	34.39	0.61		75	15.96	33.84	5.20		24.88	310.	0.2492	
449	7.44	34.42	0.32		100	13.91	33.63	4.61		25.17	283.	0.3234	
552	6.40	34.41	0.30		150	11.41	33.87	3.20		25.84	220.	0.4492	
569	5.95	34.41	0.27		200	10.20	34.24	1.76		26.34	173.	0.5475	
605	5.98	34.38	0.30		250	9.56	34.32	1.11		26.52	158.	0.6303	
630	5.77	34.36	0.25		300	9.00	34.36	0.77		26.64	147.	0.7063	
659	5.69	34.42	0.23		400	7.96	34.41	0.41		26.84	129.	0.8442	
711	5.34	34.43	0.27		500	6.95	34.42	0.30		26.98	116.	0.9668	
762	5.11	34.44	0.32		600	6.01	34.39	0.25		27.09	106.	1.0780	
812	4.82	34.47	0.34		700	5.41	34.43	0.26		27.20	96.	1.1792	
1029	4.02	34.50	0.58		800	4.90	34.46	0.33		27.28	89.	1.2719	
1587	2.77	34.56	1.28		1000	4.13	34.50	0.55		27.40	78.	1.4393	
					1200	3.52	34.52	0.77		27.47	71.	1.5889	
					1500	2.87	34.55	1.12		27.56	64.	1.7911	
U. S. S. SERRANO; May 17, 1949; 1516 GCT; 23°17'N, 119°10'W; sounding, 2,200 fm; wind, 310°, force 2; weather, overcast; sea, slight; wire angle, 8°, 10°.													303
0	17.83	33.93	5.34	0.27	0	17.83	33.93	5.34		24.51	343.	0.0000	
25	17.50	33.92	5.32	0.28	10	17.75	33.93	5.33		24.53	341.	0.0342	
49	16.35	33.84	5.45	0.30	20	17.61	33.93	5.32		24.57	339.	0.0682	
99	14.96	33.70	5.40	0.34	30	17.30	33.91	5.35		24.63	333.	0.1018	
199	10.90	34.11	1.97		50	16.35	33.84	5.45		24.80	318.	0.1669	
299	9.62	34.40	0.76		75	15.70	33.73	5.43		24.86	312.	0.2456	
399	8.37	34.41	0.43		100	14.93	33.70	5.39		25.01	299.	0.3220	
502	7.36	34.39	0.29		150	13.50	33.82	3.55		25.40	263.	0.4624	
552	6.87	34.42	0.21		200	10.90	34.12	1.96		26.13	194.	0.5765	
585	6.39	34.44	0.19		250	10.20	34.32	1.26		26.41	168.	0.6580	
639	5.94	34.42	0.17		300	9.62	34.40	0.75		26.57	154.	0.7385	
692	5.58	34.45	0.22		400	8.37	34.41	0.43		26.78	135.	0.8830	
744	5.26	34.49	0.23		500	7.38	34.39	0.30		26.91	124.	1.0124	
798	5.02	34.46	0.27		600	6.30	34.44	0.19		27.09	106.	1.1273	
851	4.72	34.52	0.28		700	5.50	34.46	0.22		27.21	95.	1.2281	
1064	3.97	34.52	0.54		800	5.00	34.47	0.27		27.28	90.	1.3205	
1596	2.71	34.60	1.37		1000	4.18	34.52	0.45		27.41	78.	1.4877	
					1200	3.56	34.54	0.69		27.49	70.	1.6355	
					1500	2.87	34.58	1.21		27.58	61.	1.8329	
U. S. S. SERRANO; May 18, 1949; 0737 GCT; 20°49'N, 119°57'W; sounding, 2,350 fm; wind, 300°, force 1; weather, clear; sea, slight; wire angle, 10°, 0°.													304
0	20.10	34.40	5.24	0.25	0	20.10	34.40	5.24		24.30	364.	0.0000	
25	20.10	34.39	5.40	0.26	10	20.10	34.40	5.28		24.30	364.	0.0364	
50	19.23	34.26	5.29	0.30	20	20.10	34.40	5.39		24.30	364.	0.0728	
99	18.09	34.23	5.42	0.33	30	20.09	34.38	5.38		24.29	366.	0.1093	
195	11.46	33.95	3.11		50	19.23	34.26	5.29		24.42	354.	0.1813	
294	9.88	34.43	0.81		75	18.34	34.25	5.35		24.63	334.	0.2673	
393	8.35	34.46	0.39		100	18.09	34.23	5.42		24.68	330.	0.3504	
491	6.94	34.40	0.37		150	17.89	34.22	4.52		24.72	328.	0.5150	
539	6.62	-	0.30		200	11.39	33.95	2.98		25.91	215.	0.6507	
555	6.47	34.42	0.27		250	10.58	34.04	1.55		26.12	195.	0.7532	
605	6.03	34.42	0.27		300	9.85	34.45	0.77		26.57	154.	0.8405	
657	5.74	34.43	0.27		400	8.24	34.45	0.40		26.85	128.	0.9815	
708	5.44	34.42	0.30		500	6.91	34.40	0.37		27.02	116.	1.1035	
759	5.18	34.42	0.35		600	6.10	34.42	0.27		27.10	105.	1.2140	
809	4.94	34.51	0.39		700	5.50	34.42	0.30		27.18	98.	1.3156	
1012	4.20	34.54	0.55		800	4.99	34.51	0.38		27.31	86.	1.4079	
1523	2.93	34.60	1.21		1000	4.23	34.54	0.55		27.42	77.	1.5711	
					1200	3.82	34.56	0.73		27.48	72.	1.7197	
					1500	3.00	34.60	1.16		27.59	61.	1.9198	

USNEL CRUISE III

OBSERVED					INTERPOLATED					COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m
305	U. S. S. SERRANO; May 18, 1949; 2343 GCT; 18°33'N, 120°42'W; sounding, 2,300 fm; wind, 010°, force 1; weather, partly cloudy; sea, moderate; wire angle, 30°, 30°.											
0	23.58	34.44	4.75		0	23.58	34.44	4.75		23.36	453.	0.0000
24	23.47	34.42	4.78		10	23.54	34.44	4.76		23.37	452.	0.0452
47	21.17	34.30	4.86		20	23.50	34.43	4.78		23.38	452.	0.0904
94	14.20	33.82	3.73		30	23.45	34.41	4.81		23.38	452.	0.1356
187	12.16	34.70	0.08		50	20.00	34.26	4.85		24.22	373.	0.2181
277	10.85	34.70	0.14		75	15.06	33.88	4.37		25.12	288.	0.3007
366	9.58	34.63	0.11		100	14.05	33.82	3.25		25.28	272.	0.3707
568	7.13	34.51	0.10		150	12.81	33.95	1.02		25.64	240.	0.4987
759	5.55	34.52	0.17		200	11.97	34.72	0.08		26.40	169.	0.6009
776	5.40	34.51	0.33		250	11.23	34.72	0.12		26.54	157.	0.6823
808	5.22	34.52	0.15		300	10.56	34.69	0.14		26.63	148.	0.7585
857	5.06	34.51	0.22		400	8.90	34.60	0.10		26.84	129.	0.8973
907	4.81	34.52	0.25		500	7.71	34.54	0.10		26.98	117.	1.0207
959	4.62	34.54	0.30		600	6.88	34.50	0.11		27.06	110.	1.1343
1068	4.21	34.56	0.42		700	6.00	34.51	0.17		27.19	98.	1.2384
1168	3.98	34.55	0.56		800	5.31	34.52	0.15		27.28	90.	1.3324
1480	3.07	34.56	0.85		1000	4.46	34.55	0.34		27.40	79.	1.5012
					1200	3.87	34.55	0.57		27.46	73.	1.6534
					1500	(3.00)	(34.56)	(0.88)		(27.53)	(68.)	(1.8655)
306	U. S. S. SERRANO; May 19, 1949; 1543 GCT; 16°00'N, 121°30'W; sounding, 2,260 fm; wind, 050°, force 2; weather, cloudy; sea, smooth; wire angle, 10°, 8°.											
0	24.94	34.23	4.78	0.23	0	24.94	34.23	4.78		22.80	507.	0.0000
26	24.29	34.23	4.80	0.23	10	24.73	34.23	4.79		22.86	501.	0.0504
52	24.20	34.23	4.80	0.25	20	24.40	34.23	4.80		22.96	492.	0.1000
104	14.34	34.39	1.01		30	24.27	34.23	4.80		23.00	488.	0.1490
207	11.27	34.74	0.14		50	24.21	34.23	4.80		23.02	487.	0.2466
311	9.93	34.62	0.12		75	19.30	34.25	4.35		23.39	357.	0.3522
414	8.60	34.57	0.13		100	14.55	34.25	1.77		24.59	244.	0.4273
621	6.56	34.51	0.21		150	12.58	34.67	0.55		26.24	183.	0.5339
828	5.24	34.51	0.30		200	11.41	34.74	0.17		26.52	157.	0.6189
880	4.97	34.52	0.34		250	10.73	34.68	0.12		26.60	151.	0.6959
935	4.70	34.55	0.44		300	10.10	34.53	0.11		26.67	145.	0.7698
990	4.46	34.56	0.47		400	8.77	34.58	0.13		26.85	129.	0.9067
1044	4.26	34.57	0.62		500	7.64	34.53	0.16		26.98	117.	1.0297
1099	4.15	34.58	0.62		600	6.73	34.51	0.20		27.09	107.	1.1418
1210	3.75	34.58	0.91		700	5.99	34.51	0.26		27.19	98.	1.2444
1320	3.47	34.60	1.08		800	5.41	34.51	0.30		27.26	92.	1.3393
1650	2.79	34.61	1.49		1000	4.42	34.56	0.50		27.41	78.	1.5087
					1200	3.78	34.57	0.88		27.49	71.	1.6571
					1500	3.04	34.61	1.31		27.59	61.	1.8551
307	U. S. S. SERRANO; May 21, 1949; 0732 GCT; 13°46'N, 122°17'W; sounding, 2,300 fm; wind, 030°, force 2; weather, partly cloudy; sea, slight; wire angle, 40°, 30°.											
0	25.47	34.60	4.68	0.3	0	25.47	34.60	4.68		22.92	495.	0.0000
26	25.25	34.61	4.70	0.3	10	25.40	34.62	4.68		22.95	492.	0.0494
52	21.40	34.48	4.96	0.4	20	25.31	34.62	4.69		22.98	490.	0.0985
104	13.55	33.99	2.23	1.7 a)	30	25.00	34.59	4.74		23.05	484.	0.1472
206	11.10	34.72	0.10	2.7	50	21.95	34.49	4.95		23.86	407.	0.2362
316	9.74	34.66	0.15	2.9	75	16.00	34.47	4.25		25.36	265.	0.3202
432	8.57	34.61	0.17	2.95	100	13.81	34.48	2.43		25.84	219.	0.3807
666	6.33	34.52	0.20	3.25	150	12.20	34.67	0.94		26.31	176.	0.4794
737	5.75	34.52	0.22	3.35	200	11.21	34.72	0.14		26.54	155.	0.5621
787	5.51	34.54	0.26	3.4	250	10.50	34.69	0.12		26.64	146.	0.6374
838	5.28	34.54	0.22	3.45	300	9.93	34.67	0.14		26.73	139.	0.7087
890	5.01	34.55	0.20	3.5	400	8.91	34.62	0.16		26.85	128.	0.8423
900	5.05	34.53	0.29	3.4	500	8.00	34.58	0.17		26.96	119.	0.9657
938	4.82	34.55	0.34	3.45	600	7.02	34.54	0.18		27.07	109.	1.0797
1040	4.49	34.57	0.48	3.35	700	6.02	34.51	0.20		27.18	98.	1.1835
1132	4.15	34.57	0.61	3.35	800	5.46	34.54	0.25		27.28	90.	1.2778
1412	3.35	34.60	1.21	3.35	1000	4.62	34.56	0.43		27.39	80.	1.4480
					1200	3.93	34.58	0.77		27.48	72.	1.5998
					1500	(3.00)	(34.61)	(1.42)		(27.60)	(61.)	(1.9987)

a) Alternate value of 2.25.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	
U. S. S. SERRANO; May 22, 1949; 1544 GCT; 09°10'N, 123°58'W; sounding, 2,380 fm; wind, 040°, force 3; weather, squally; sea, slight; wire angle, 20°, 20°.													308
0	27.42	34.40	4.35	0.28	0	27.42	34.40	4.35		22.15	568.	0.0000	
27	27.42	34.41	4.32	0.27	10	27.42	34.40	4.35		22.15	569.	0.0569	
53	-	34.66	3.98	0.37	20	27.42	34.41	4.33		22.16	568.	0.1138	
107	12.09	34.74	0.49	(2.+)	30	27.41	34.42	4.29		22.17	568.	0.1706	
221	10.59	34.74	0.61	2.18	50	25.05	34.65	4.03		23.08	482.	0.2755	
330	9.75	34.67	0.39	2.26	75	13.20	34.70	2.75		26.14	190.	0.3595	
440	8.80	34.65	0.16	2.98	100	12.20	34.73	0.57		26.36	170.	0.4046	
661	6.44	34.53	0.28	3.26	150	11.43	34.76	0.55		26.53	155.	0.4858	
882	5.01	34.54	0.60	3.36	200	10.82	34.75	0.60		26.63	146.	0.5610	
890	5.02	34.55	0.59	3.30	250	10.36	34.72	0.53		26.69	141.	0.6329	
949	4.82	34.49	0.70	3.40	300	9.96	34.68	0.40		26.73	139.	0.7030	
1006	4.61	34.50	0.82	3.26	400	9.19	34.66	0.20		26.84	130.	0.8373	
1063	4.36	34.54	0.96	3.30	500	8.02	34.61	0.17		26.98	117.	0.9606	
1120	4.17	34.54	1.06	3.10	600	7.00	34.55	0.23		27.09	108.	1.0730	
1232	3.85	34.58	1.20	-	700	6.18	34.53	0.34		27.18	99.	1.1766	
1376	3.53	34.58	1.37	3.06	800	5.51	34.53	0.41		27.27	92.	1.2720	
1695	2.82	34.60	1.79	2.88	1000	4.63	34.50	0.81		27.34	85.	1.4482	
					1200	3.96	34.57	1.17		27.47	73.	1.6058	
					1500	3.21	34.59	1.53		27.60	65.	1.8122	
U. S. S. SERRANO; May 22, 1949; 2343 GCT; 08°15'N, 123°48'W; sounding, 2,310 fm; wind, 030°, force 3; weather, partly cloudy; sea, slight; wire angle, 20°, 15°.													309
0	27.94	34.07	4.45	0.23	0	27.94	34.07	4.45		21.73	609.	0.0000	
26	27.79	34.02	4.39	0.23	10	27.92	34.04	4.43		21.72	610.	0.0610	
52	22.01	34.79	3.44	0.85	20	27.85	34.03	4.38		21.74	609.	0.1220	
104	12.99	34.70	0.32	2.37	30	27.30	34.02	4.28		21.92	592.	0.1821	
213	10.54	34.71	0.47	2.33	50	22.66	34.67	3.75		23.80	413.	0.2826	
319	9.73	34.70	0.44	2.43	75	18.10	34.76	0.82		25.83	219.	0.3706	
426	8.88	34.65	0.37	2.65	100	13.70	34.70	0.33		26.04	201.	0.4321	
639	6.56	34.54	0.22	3.11	150	11.52	34.71	0.34		26.47	160.	0.5224	
851	5.27	34.55	0.58	3.25	200	10.73	34.71	0.43		26.62	147.	0.5993	
860	5.20	34.55	0.60	3.21	250	10.21	34.71	0.48		26.71	140.	0.6711	
914	4.93	34.56	0.77	3.03	300	9.84	34.70	0.47		26.77	135.	0.7399	
968	4.71	34.54	0.93	3.01	400	9.11	34.66	0.40		26.85	128.	0.8718	
1021	4.51	34.57	0.96	3.13	500	7.93	34.60	0.29		26.99	116.	0.9941	
1076	-	34.56	1.04	2.93	600	6.91	34.55	0.24		27.10	107.	1.1055	
1183	3.96	34.59	1.16	2.99	700	6.09	34.54	0.24		27.20	97.	1.2074	
1293	3.66	34.57	1.28	3.01	800	5.50	34.55	0.47		27.28	89.	1.3006	
1626	2.89	34.60	1.74	2.79	1000	4.60	34.56	0.95		27.40	80.	1.4696	
					1200	3.91	34.59	1.18		27.48	72.	1.6214	
					1500	3.14	34.59	1.57		27.57	64.	1.8251	
U. S. S. SERRANO; May 23, 1949; 1540 GCT; 05°48'N, 124°46'W; sounding, 2,340 fm; wind, 020°, force 1; weather, intermittent slight rain; sea, smooth; wire angle, 35°, 25°.													310
0	27.67	34.12	4.53	0.28	0	27.67	34.12	4.53		21.86	596.	0.0000	
25	27.65	34.12	4.52	0.30	10	27.67	34.12	4.53		21.86	597.	0.0597	
50	26.07	34.76	4.10	0.49	20	27.66	34.12	4.53		21.87	597.	0.1194	
100	15.76	34.68	1.61	1.58	30	27.51	34.13	4.50		21.92	592.	0.1788	
203	11.04	34.73	0.73	2.18	50	26.07	34.76	4.10		22.84	505.	0.2884	
409	8.95	34.67	0.49	2.56	75	24.16	34.71	2.85		23.40	453.	0.4079	
618	6.80	34.52	0.40	3.06	100	15.76	34.68	1.61		25.57	245.	0.4951	
627	6.83	34.59	0.51	2.96	150	12.35	34.70	1.04		26.31	176.	0.6004	
673	6.41	34.55	0.82	2.94	200	11.09	34.73	0.73		26.57	152.	0.6825	
674	6.37	34.56	0.83	2.74	250	10.58	34.73	0.60		26.66	145.	0.7567	
722	6.12	34.57	0.93	2.86	300	10.08	34.71	0.53		26.73	139.	0.8275	
729	6.02	34.55	0.81	2.96	400	9.05	34.67	0.49		26.87	127.	0.9601	
770	5.81	34.54	0.82	2.94	500	7.82	34.64	0.49		27.04	112.	1.0792	
815	5.52	34.55	0.74	3.18	600	6.97	34.60	0.50		27.13	104.	1.1869	
906	5.00	34.57	0.95	3.14	700	6.27	34.56	0.73		27.19	98.	1.2879	
1101	4.26	34.58	1.39	2.92	800	5.62	34.54	0.76		27.26	92.	1.3831	
1408	3.35	34.61	1.67	3.00	1000	4.63	34.58	1.17		27.41	79.	1.5541	
					1200	3.94	34.59	1.50		27.49	71.	1.7041	341
					1500	(3.14)	(34.61)	(1.75)		(27.58)	(62.)	(1.9045)	

USNEL

CRUISE III

OBSERVED					INTERPOLATED					COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m

311 U. S. S. SERRANO; May 23, 1949; 2343 GCT; 05°07'N, 124°47'W; sounding, 2,280 fm; wind, 180°, force 3; weather, continuous slight rain; sea, moderate; wire angle, 40°, 35°.

0	27.83	34.46	4.73		0	27.83	34.46	4.73	22.07	577.	0.0000
24	27.82	34.45	4.69		10	27.83	34.46	4.71	22.07	577.	0.0577
48	26.87	34.64	4.74		20	27.83	34.45	4.70	22.06	578.	0.1155
98	18.88	34.75	2.85		30	27.83	34.53	4.71	22.12	573.	0.1731
197	10.71	34.66	-		50	26.55	34.65	4.73	22.62	526.	0.2830
400	-	34.70	-		75	23.31	34.72	4.15	23.65	428.	0.4022
607	7.07	34.60	0.51		100	18.40	34.75	-	25.00	300.	0.4932
660	6.59	34.57	0.77		150	11.51	34.68	-	26.45	162.	0.6088
674	6.45	34.57	0.82		200	10.70	34.66	-	26.58	151.	0.6870
714	6.19	34.56	0.63		250	10.37	34.67	-	26.65	145.	0.7610
726	6.03	34.57	0.86		300	10.00	34.69	-	26.73	139.	0.8320
775	5.72	34.58	0.78		400	9.08	34.70	-	26.88	126.	0.9643
826	5.36	34.57	0.89		500	8.10	34.66	-	27.01	114.	1.0844
877	-	34.50	0.88		600	7.14	34.60	-	27.10	106.	1.1948
983	4.66	34.57	1.12		700	6.30	34.57	0.85	27.20	98.	1.2969
1192	3.83	34.58	1.49		800	5.52	34.57	0.84	27.30	89.	1.3902
1532	2.98	34.62	1.41		1000	4.59	34.57	1.14	27.41	79.	1.5580
					1200	3.81	34.58	1.30	27.49	70.	1.7074
					1500	3.03	34.62	1.40	27.60	60.	1.9033

312 U. S. S. SERRANO; May 25, 1949; 0050 GCT; 01°22.5'N, 125°03'W; sounding, 2,500 fm; wind, 100°, force 3; weather, cloudy; sea, slight; wire angle, 60°, 60°.

0	25.22	34.92	4.40	0.6	0	25.22	34.92	4.40	23.24	465.	0.0000
20	24.85	34.92	4.38	0.64	10	24.00	34.92	4.40	23.30	459.	0.0462
40	22.65	34.83	3.73	0.80	20	24.85	34.92	4.38	23.29	461.	0.0922
83	14.50	34.93	1.50	1.77	30	24.80	34.87	4.21	23.33	458.	0.1381
176	12.39	34.91	1.57	1.80	50	20.50	34.83	3.07	24.52	344.	0.2183
359	10.97	34.83	0.54	2.16	75	15.00	34.92	1.57	25.93	211.	0.2877
432	8.94	34.70	0.79	2.40	100	13.67	34.93	1.50	26.22	184.	0.3370
463	8.69	34.70	0.80	2.66	150	12.66	34.92	1.56	26.42	166.	0.4244
494	8.17	34.70	0.70	2.76	200	12.17	34.90	1.47	26.50	159.	0.5058
524	7.65	34.69	0.91	2.68	250	11.72	34.89	1.15	26.58	153.	0.5839
546	7.51	34.63	1.03	2.66	300	11.41	34.86	0.88	26.68	145.	0.6583
555	7.45	34.68	1.08	2.60	400	9.55	34.77	0.67	26.87	127.	0.7942
612	7.03	34.69	1.24	2.68	500	8.10	34.65	0.73	27.00	115.	0.9154
625	6.93	34.61	1.32	2.48	600	7.14	34.61	1.21	27.11	106.	1.0258
669	6.47	34.60	1.53	2.68							

313 U. S. S. SERRANO; May 25, 1949; 1245 GCT; 00°30'S, 125°00'W; sounding, 2,410 fm; wind, 140°, force 2; weather, partly cloudy; sea, moderate; wire angle, 15°, 20°.

0	24.44	35.39	4.23	0.75	0	24.44	35.39	4.23	23.83	409.	0.0000
27	24.15	35.40	3.99	0.77	10	24.40	35.39	4.16	23.84	408.	0.0408
55	21.86	35.43	3.26	0.88	20	24.29	35.40	4.08	23.88	404.	0.0814
110	16.41	35.27	2.87	1.24	30	24.10	35.41	3.97	23.94	399.	0.1216
224	12.58	34.94	2.37	1.89	50	23.10	35.43	3.47	24.25	370.	0.1984
448	8.44	34.69	0.94	3.14	75	18.70	35.38	3.07	25.41	261.	0.2772
679	6.52	34.57	1.43	3.36	100	17.00	35.31	2.92	25.76	227.	0.3382
728	6.30	34.57	1.82		150	15.01	35.15	2.70	26.23	185.	0.4412
789	5.56	34.56	2.86r		200	13.26	34.99	2.49	26.35	174.	0.5308
850	5.20	34.54	1.62		250	11.92	34.90	2.20	26.54	156.	0.6132
965	4.73	34.56	1.77		300	10.79	34.83	1.73	26.70	142.	0.6877
1021	4.58	34.53	2.95r		400	9.09	34.73	0.93	26.91	123.	0.8201
1371	3.42	34.60	1.90		500	7.87	34.65	0.83	26.97	119.	0.9408
1722	2.52	34.64	2.23		600	7.00	34.59	1.15	27.12	105.	1.0526
					700	6.47	34.57	1.47	27.17	100.	1.1551
					800	5.49	34.55	1.59	27.28	90.	1.2500
					1000	4.61	34.54	1.80	27.39	81.	1.4212
					1200	4.03	34.57	1.85	27.46	74.	1.5764
					1500	3.04	34.61	2.01	27.59	61.	1.7789

OBSERVED					INTERPOLATED					COMPUTED			
Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m	
U. S. S. SERRANO; May 26, 1949; 1452 GCT; 03°50'N, 125°12'W; sounding, 2,480 fm; wind, 070°, force 1; weather, cloudy; sea, moderate; wire angle, 40°, 40°.													314
0	27.92	34.38	4.43	0.25	0	27.92	34.38	4.43		21.98	585.	0.0000	
23	27.88	34.39	4.35	0.28	10	27.90	34.38	4.38		21.98	585.	0.0585	
47	27.88	34.38	4.40	0.26	20	27.88	34.39	4.36		22.00	584.	0.1170	
95	17.25	34.83	1.98	1.47	30	27.88	34.39	4.37		22.00	585.	0.1754	
195	12.34	34.86	0.90	2.13	50	27.86	34.38	4.39		22.00	586.	0.2924	
356	9.74	34.72	1.46	2.21	75	24.00	34.70	3.20		23.44	449.	0.4217	
481	9.66	34.66	1.43	2.29	100	16.85	34.84	1.85		25.45	258.	0.5100	
507	8.62	34.67	0.72	2.40	150	13.77	34.86	1.20		26.15	192.	0.6224	
568	7.61	34.61	0.49	2.84	200	12.22	34.86	0.90		26.46	163.	0.7112	
619	6.96	34.61	0.66	3.26	250	11.20	34.82	1.02		26.62	149.	0.7892	
665	6.49	34.60	0.94	3.30	300	10.43	34.76	1.25		26.71	141.	0.8616	
710	6.00	34.56	1.26	3.28	400	9.39	34.69	1.34		26.83	131.	0.9973	
756	5.67	34.55	1.40	3.31	500	8.71	34.66	0.77		26.92	124.	1.1245	
802	5.49	34.56	1.40	3.26	600	7.19	34.61	0.59		27.11	106.	1.2396	
892	4.99	34.54	1.40	3.26	700	6.11	34.57	1.20		27.22	95.	1.3404	
1075	4.25	34.56	1.52	3.05	800	5.50	34.56	1.40		27.29	89.	1.4327	
					1000	4.50	34.54	1.47		27.39	80.	1.6017	
U. S. S. SERRANO; May 27, 1949; 1543 GCT; 07°26'N, 125°35'W; sounding, 2,460 fm; wind, 140° force 1; weather, cloudy; sea, slight; wire angle, 5°, 5°.													315
0	27.88	34.21	4.47	0.27	0	27.88	34.21	4.47		21.86	596.	0.0000	
25	27.59	34.23	4.35	0.28	10	27.80	34.21	4.41		21.90	594.	0.0595	
50	27.11	34.61	4.51	0.31	20	27.68	34.22	4.36		21.93	590.	0.1187	
100	12.35	34.72	0.25	2.47	30	27.52	34.24	4.37		22.00	584.	0.1774	
200	10.48	34.73	0.73	2.37	50	27.11	34.61	4.51		22.41	546.	0.2904	
400	8.84	34.65	0.22	2.85	75	18.10	34.69	0.95		25.03	296.	0.3957	
600	6.66	34.57	0.19	3.03	100	12.35	34.72	0.25		26.32	174.	0.4545	
650	6.30	34.58	0.25	3.23	150	11.01	34.73	0.52		26.58	150.	0.5353	
700	5.89	34.56	0.39	3.37	200	10.48	34.73	0.73		26.68	142.	0.6082	
711	5.89	34.57	0.39	3.29	250	10.17	34.72	0.64		26.72	138.	0.6782	
762	5.55	34.53	0.54	3.23	300	9.79	34.70	0.50		26.77	135.	0.7464	
812	5.28	34.57	0.73	3.25	400	8.84	34.65	0.22		26.89	125.	0.8761	
863	5.01	34.57	0.72	3.23	500	7.63	34.61	0.20		27.04	111.	0.9940	
914	4.85	34.59	0.82	3.19	600	6.66	34.57	0.19		27.15	102.	1.1003	
1015	4.47	34.58	1.14	3.05	700	5.89	34.57	0.39		27.25	92.	1.1973	
1218	3.78	34.60	1.38	3.11	800	5.32	34.56	0.69		27.31	87.	1.2870	
1553	3.00	34.62	1.72	3.09	1000	4.51	34.59	1.10		27.43	77.	1.4506	
					1200	3.85	34.60	1.37		27.51	69.	1.5964	
					1500	3.09	34.62	1.67		27.60	60.	1.7911	
U. S. S. SERRANO; May 27, 1949; 2338 GCT; 08°16'N, 125°43'W; sounding, 2,400 fm; wind, calm; weather, cloudy; sea, smooth; wire angle, 20°, 15°.													316
0	28.11	33.97	4.43	0.25	0	28.11	33.97	4.43		21.61	621.	0.0000	
26	27.63	33.98	4.42	0.28	10	27.91	33.97	4.43		21.67	615.	0.0618	
51	17.76	34.50	2.92	1.08	20	27.50	33.98	4.42		21.81	602.	0.1226	
103	12.19	34.71	0.21	2.39	30	25.50	34.00	4.37		22.46	541.	0.1797	
207	10.46	34.70	0.60	2.31	50	17.80	34.49	3.00		24.95	303.	0.2641	
414	8.87	34.63	0.35	2.85	75	13.70	34.66	1.00		26.01	203.	0.3274	
620	6.58	34.62	0.18	3.19	100	12.32	34.70	0.27		26.31	175.	0.3746	
655	6.22	34.56	0.18	3.37	150	11.25	34.71	0.40		26.52	156.	0.4571	
672	6.21	34.53	0.16	3.27	200	10.56	34.70	0.58		26.64	145.	0.5323	
703	5.90	34.55	0.24	3.39	250	10.13	34.67	0.57		26.69	141.	0.6039	
722	5.81	34.53	0.28	3.27	300	9.76	34.66	0.51		26.75	137.	0.6735	
750	5.58	34.55	0.34	3.29	400	9.01	34.63	0.38		26.85	129.	0.8065	
798	5.31	34.54	0.43	3.35	500	8.06	34.63	0.26		26.98	117.	0.9295	
845	5.11	34.55	0.50	3.11	600	6.89	34.63	0.20		27.16	101.	1.0383	
939	4.75	34.54	0.82	3.33	700	5.92	34.55	0.23		27.23	94.	1.1357	
1421	3.28	34.60	1.55	3.17	800	5.30	34.54	0.39		27.30	88.	1.2269	
					1000	4.50	34.55	0.95		27.40	79.	1.3941	
					1200	3.81	34.57	1.24		27.48	71.	1.5445	
					1500	(3.16)	(34.61)	(1.65)		(27.58)	(63.)	(1.7449)	

USNEL

CRUISE III

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

317 U. S. S. SERRANO; May 28, 1949; 1542 GCT; 10°41'N, 126°15'W; sounding, 2,440 fm; wind, 040°, force 2; weather, partly cloudy; sea, moderate; wire angle, 38°, 30°.

0	27.38	34.30	4.46	0.45	0	27.38	34.30	4.46	22.09	574.	0.0000
25	27.33	34.31	4.42	0.30	10	27.37	34.30	4.43	22.12	572.	0.0573
51	26.96	34.60	4.43	0.34	20	27.35	34.31	4.42	22.14	570.	0.1144
101	12.60	34.66	0.61	2.09	30	27.32	34.32	4.42	22.20	565.	0.1712
208	10.79	34.70	0.57	2.25	50	26.97	34.60	4.43	22.44	543.	0.2820
419	9.14	34.61	0.31	2.57	75	20.15	34.62	3.88	24.46	351.	0.3938
632	6.95	34.55	0.25	-	100	12.63	34.64	0.62	26.21	185.	0.4608
669	6.66	34.55	0.29	3.25	150	11.43	34.67	0.58	26.46	161.	0.5473
686	6.45	34.54	0.32	3.21	200	10.87	34.70	0.57	26.58	151.	0.6253
719	6.28	34.52	0.31	3.01	250	10.45	34.69	0.52	26.65	145.	0.6993
740	5.87	34.53	0.39	3.07	300	10.09	34.67	0.46	26.70	142.	0.7711
766	5.90	34.51	0.40	3.33	400	9.30	34.62	0.33	26.79	134.	0.9090
816	5.61	34.52	0.41	3.19	500	8.24	34.58	0.26	26.93	122.	1.0373
866	5.42	34.54	0.51	3.17	600	7.26	34.55	0.25	27.05	112.	1.1543
965	4.97	34.54	0.72	3.25	700	6.40	34.54	0.32	27.16	102.	1.2609
1174	4.13	34.53	1.10	3.17	800	5.67	34.51	0.40	27.23	95.	1.3592
1509	3.27	34.58	1.61	2.93	1000	4.82	34.54	0.78	27.35	84.	1.5384
					1200	4.04	34.53	1.14	27.43	77.	1.6994
					1500	3.28	34.58	1.60	27.55	66.	1.9142

318 U. S. S. SERRANO; May 28, 1949; 2315 GCT; 11°32'N, 126°30'W; sounding, 2,500 fm; wind, 070°, force 2; weather, partly cloudy; sea, slight; wire angle, 45°, 30°.

0	27.56	34.58	4.61	0.24	0	27.56	34.58	4.61	22.24	560.	0.0000
26	27.28	34.44	4.33	0.27	10	27.40	34.53	4.47	22.26	559.	0.0559
52	27.18	34.49	4.38	0.27	20	27.31	34.47	4.36	22.24	561.	0.1119
106	13.10	34.64	0.28	2.26	30	27.25	34.44	4.33	22.24	561.	0.1680
214	10.86	34.73	0.37	2.34	50	27.19	34.48	4.37	22.29	558.	0.2799
430	9.06	34.61	0.12	2.74	75	22.70	34.55	3.75	23.70	423.	0.4025
563	7.37	34.54	0.30	3.16	100	13.39	34.62	0.32	26.04	201.	0.4805
605	7.13	34.51	0.35	3.10	150	11.66	34.69	0.33	26.43	164.	0.5717
645	6.76	34.50	0.27	3.06	200	11.01	34.72	0.36	26.58	152.	0.6506
646	6.81	34.52	0.27	3.04	250	10.62	34.72	0.32	26.65	146.	0.7250
688	6.49	34.51	0.28	3.10	300	10.29	34.69	0.24	26.68	144.	0.7974
706	6.36	34.52	0.28	3.10	400	9.39	34.63	0.12	26.79	135.	0.9367
732	6.15	34.52	0.30	3.36	500	8.06	34.58	0.20	26.96	120.	1.0641
768	5.96	34.52	0.30	3.16	600	7.17	34.51	0.35	27.04	112.	1.1800
823	5.67	34.52	0.53	3.18	700	6.39	34.51	0.33	27.14	104.	1.2878
1017	4.70	34.53	0.58	3.26	800	5.78	34.52	0.44	27.22	96.	1.3875
1319	3.66	34.56	1.12	3.12	1000	4.78	34.53	0.58	27.34	86.	1.5689
					1200	4.01	34.55	0.86	27.45	75.	1.7295
					1500	(3.38)	(34.57)	(1.44)	(27.53)	(68.)	(1.9440)

319 U. S. S. SERRANO; May 29, 1949; 1543 GCT; 13°58.5'N, 127°11'W; sounding, 2,440 fm; wind, 030°, force 2; weather, partly cloudy; sea, smooth; wire angle, 0°, 5°.

0	24.83	34.49	4.64	0.26	0	24.83	34.49	4.64	23.03	485.	0.0000
25	24.70	34.50	4.66	0.29	10	24.81	34.49	4.65	23.04	485.	0.0485
50	24.64	34.52	4.68	0.32	20	24.76	34.50	4.65	23.06	483.	0.0969
100	17.74	34.31	4.85	0.51	30	24.70	34.51	4.67	23.08	481.	0.1451
200	11.85	34.76	0.10	2.64	50	24.64	34.52	4.68	23.11	479.	0.2411
400	9.59	34.62	0.10	2.84	75	22.20	34.43	4.77	23.75	419.	0.3533
600	7.24	34.52	0.21	3.18	100	17.74	34.31	4.85	24.83	316.	0.4451
650	6.74	34.52	0.21	3.18	150	13.43	34.57	2.00	25.99	206.	0.5758
700	6.42	34.52	0.21	3.24	200	11.85	34.76	0.10	26.45	164.	0.6683
725	6.21	34.52	0.17	3.42	250	11.23	34.74	0.10	26.55	155.	0.7480
776	5.92	34.51	0.15	3.28	300	10.71	34.70	0.10	26.61	151.	0.8244
828	5.59	34.52	0.17	3.34	400	9.59	34.62	0.10	26.74	139.	0.9692
880	5.17	34.52	0.21	3.38	500	8.49	34.55	0.15	26.87	129.	1.1030
932	5.07	34.52	0.21	3.40	600	7.24	34.52	0.21	27.03	114.	1.2240
1035	4.60	34.52	0.40	3.40	700	6.42	34.52	0.21	27.14	103.	1.3324
1242	3.81	34.55	0.82	3.24	800	5.77	34.51	0.15	27.22	97.	1.4322
1553	3.06	34.56	1.33	3.08	1000	4.76	34.52	0.33	27.34	85.	1.6132
					1200	3.97	34.54	0.74	27.44	75.	1.7732
					1500	3.16	34.56	1.23	27.54	66.	1.9853

U. S. S. SERRANO; May 29, 1949; 2317 GCT; 14°49'N, 127°20'W; sounding, 2,530 fm; wind, 010°, force 3; weather, partly cloudy; sea, slight; wire angle, 20°, 20°. 320

OBSERVED					INTERPOLATED					COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m
0	24.61	34.63	4.66	0.28	0	24.61	34.63	4.66		23.20	468.	0.0000
25	24.39	34.59	4.66	0.30	10	24.61	34.61	4.66		23.19	470.	0.0469
50	23.82	34.58	4.70	0.29	20	24.49	34.60	4.66		23.23	467.	0.0937
100	19.30	34.48	4.88	0.33	30	24.25	34.59	4.67		23.28	462.	0.1401
203	11.35	34.59	0.19	2.38	50	23.82	34.58	4.70		23.40	451.	0.2314
409	8.71	34.55	0.17	2.74	75	21.20	34.55	4.80		24.12	383.	0.3358
620	6.61	34.52	0.25	3.02	100	19.30	34.48	4.88		24.57	341.	0.4264
672	6.21	34.48	0.32	3.02	150	13.32	34.52	2.45		25.98	208.	0.5637
724	5.77	34.47	0.40	3.02	200	11.42	34.59	0.21		26.40	168.	0.6578
761	5.59	34.51	0.35	3.18	250	10.70	34.59	0.17		26.53	157.	0.7391
817	5.30	34.48	0.45	3.08	300	10.04	34.58	0.14		26.64	147.	0.8152
874	5.05	34.48	0.45	3.14	400	8.84	34.55	0.17		26.81	132.	0.9550
929	4.81	34.50	0.49	3.14	500	7.74	34.54	0.18		26.97	118.	1.0799
988	4.56	34.52	0.58	3.20	600	6.80	34.52	0.23		27.09	107.	1.1924
1104	4.12	34.51	0.75	3.14	700	5.98	34.47	0.37		27.16	101.	1.2966
1332	3.44	34.56	0.39r	3.08	800	5.39	34.49	0.42		27.25	93.	1.3936
1680	2.70	34.60	1.63	2.94	1000	4.51	34.51	0.58		27.36	82.	1.5690
					1200	3.81	34.53	0.89		27.45	74.	1.7254
					1500	3.06	34.58	1.40		27.58	63.	1.9303

U. S. S. SERRANO; May 30, 1949; 1515 GCT; 16°27'N, 128°57'W; sounding, 2,580 fm; wind, 030°, force 1; weather, cloudy; sea, smooth; wire angle, 5°, 8°. 321

0	23.81	34.62	4.80	0.32	0	23.81	34.62	4.80		23.43	446.	0.0000
25	23.69	34.61	4.74	0.33	10	23.78	34.61	4.77		23.43	446.	0.0446
50	21.81	34.62	4.90	0.30	20	23.81	34.61	4.74		23.42	448.	0.0893
99	18.74	34.47	5.09	0.31	30	23.29	34.61	4.76		23.58	434.	0.1334
199	10.90	34.16	2.18	1.82	50	21.81	34.62	4.90		24.00	394.	0.2161
398	8.24	34.43	0.39	2.70	75	20.45	34.56	5.01		24.33	363.	0.3107
596	6.31	34.45	0.29	3.08	100	18.70	34.47	5.09		24.71	327.	0.3971
644	5.95	34.47	0.26	3.14	150	12.78	34.23	3.77		25.86	219.	0.5337
693	5.62	34.45	0.29	-	200	10.89	34.16	2.17		26.16	190.	0.6360
700	5.63	34.46	0.29	3.38	250	10.19	34.26	1.41		26.36	172.	0.7267
750	5.34	34.46	0.32	3.32	300	9.51	34.33	0.90		26.53	157.	0.8091
800	5.10	34.47	0.38	3.38	400	8.23	34.43	0.39		26.81	132.	0.9535
850	4.84	34.46	0.45	3.34	500	7.16	34.44	0.33		26.98	117.	1.0776
900	4.67	34.50	0.52	3.22	600	6.28	34.45	0.29		27.10	105.	1.1885
1000	4.24	34.49	0.65	3.22	700	5.63	34.46	0.29		27.19	97.	1.2896
1200	3.57	34.52	1.01	3.20	800	5.10	34.47	0.38		27.26	91.	1.3835
1500	2.92	34.59	1.42	3.22	1000	4.24	34.49	0.65		27.38	81.	1.5549
					1200	3.57	34.52	1.01		27.47	72.	1.7073
					1500	2.92	34.59	1.42		27.59	61.	1.9065

U. S. S. SERRANO; May 30, 1949; 2317 GCT; 17°08'N, 129°32'W; sounding, 2,580 fm; wind, 030°, force 3; weather, cloudy; sea, slight; wire angle, 50°, 40°. 322

0	23.61	34.60	4.85	0.26	0	23.61	34.60	4.85		23.47	442.	0.0000
42	23.24	34.61	4.76	0.27	10	23.59	34.60	4.83		23.48	442.	0.0442
78	21.53	34.62	4.67	0.35	20	23.51	34.60	4.80		23.50	440.	0.0883
109	15.34	34.05	4.04	0.78	30	23.41	34.60	4.78		23.53	438.	0.1322
135	13.12	34.48	0.71	2.16	50	22.98	34.61	4.74		23.66	426.	0.2186
290	9.18	34.46	0.67	2.40	75	21.69	34.61	4.69		24.03	392.	0.3209
465	7.41	34.44	0.23	2.90	100	18.70	34.30	4.31		24.58	340.	0.4124
488	7.15	34.48	0.17	3.06	150	12.40	34.19	0.68		25.90	214.	0.5505
517	7.04	34.48	0.19	2.94	200	10.60	34.47	0.68		26.45	163.	0.6449
525	6.75	34.48	0.18	3.00	250	9.61	34.47	0.68		26.62	147.	0.7226
567	6.44	34.46	0.19	3.00	300	9.09	34.46	0.65		26.70	141.	0.7947
571	6.58	34.49	0.17	2.98	400	8.12	34.44	0.41		26.84	129.	0.9296
599	6.12	34.47	0.24	3.12	500	7.01	34.48	0.17		27.03	112.	1.0498
633	5.92	34.48	0.23	3.08	600	6.12	34.47	0.24		27.14	102.	1.1564
702	5.49	34.49	0.30	3.16	700	5.50	34.49	0.29		27.23	93.	1.2538
829	4.64	34.51	0.53	3.18	800	4.82	34.50	0.47		27.32	85.	1.3428
1010	3.79	34.55	0.85	3.08	1000	3.82	34.55	0.83		27.47	71.	1.4988

USNEL

CRUISE III

OBSERVED					INTERPOLATED					COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m
323	U. S. S. SERRANO; May 31, 1949; 1516 GCT; 17°32'N, 132°12'W; sounding, 2,720 fm; wind, 040°, force 3; weather, fog; sea, slight; wire angle, 45°, 50°.											
0	23.72	34.81	4.63	0.30	0	23.72	34.81	4.63		23.60	430.	0.0000
37	23.69	34.79	4.74	0.32	10	23.74	34.81	4.65		23.60	431.	0.0430
73	20.61	34.52	4.99	0.30	20	23.78	34.80	4.68		23.58	433.	0.0862
109	18.01	34.42	4.26	0.58	30	23.79	34.80	4.71		23.57	434.	0.1295
145	14.74	34.14	4.02	0.70	50	21.40	34.71	4.85		24.18	376.	0.2105
320	9.70	34.40	1.12	2.28	75	20.20	34.52	4.98		24.36	360.	0.3025
526	6.52	34.43	0.30	3.12	100	18.90	34.44	4.40		24.64	334.	0.3893
584	6.17	34.43	0.31	3.12	150	14.60	34.14	3.94		25.42	261.	0.5382
640	5.85	34.43	0.33	3.48u	200	12.89	34.24	2.97		25.83	223.	0.6593
652	5.72	34.45	0.33	3.14	250	11.44	34.34	2.07		26.20	188.	0.7621
704	5.45	34.48	0.34	2.98	300	10.20	34.39	1.35		26.46	164.	0.8502
754	5.23	34.48	0.36	3.10	400	8.14	34.42	0.67		26.82	131.	0.9978
805	4.93	34.48	0.48	3.14	500	6.79	34.43	0.35		27.02	112.	1.1194
854	4.66	34.51	0.54	3.50u	600	6.09	34.43	0.32		27.10	105.	1.2280
954	4.25	34.52	0.69	3.42u	700	5.47	34.48	0.34		27.23	93.	1.3272
1160	3.72	34.55	0.95	3.06	800	4.98	34.48	0.46		27.29	89.	1.4182
1476	2.94	34.58	1.40	2.90	1000	4.16	34.53	0.74		27.42	77.	1.5834
					1200	3.59	34.56	0.99		27.51	68.	1.7282
					1500	(2.91)	(34.58)	(1.44)		(27.58)	(64.)	(1.9265)
324	U. S. S. SERRANO; May 31, 1949; 2316 GCT; 17°42'N, 133°08'W; sounding, 2,780 fm; wind, 050°, force 4; weather, cloudy; sea, moderate; wire angle, 45°, 35°.											
0	23.50	34.75	4.76	0.34	0	23.50	34.75	4.76		23.58	432.	0.0000
48	21.70	34.55	4.99	0.31	10	23.50	34.70	4.80		23.55	435.	0.0433
95	19.35	34.48	5.01	0.37	20	23.39	34.66	4.85		23.58	432.	0.0867
144	16.01	34.19	4.24	0.69	30	22.33	34.62	4.90		23.86	407.	0.1287
193	11.82	34.13	2.73	1.58	50	21.63	34.55	4.97		24.00	394.	0.2087
402	7.92	34.43	0.38	2.84	75	20.50	34.50	5.00		24.27	369.	0.3041
598	5.85	34.44	0.39	3.10	100	18.89	34.47	5.00		24.66	332.	0.3917
621	5.73	34.45	0.44	3.10	150	14.80	34.18	4.01		25.40	263.	0.5404
653	5.49	34.44	0.46	3.16	200	11.61	34.13	2.59		26.01	206.	0.6575
671	5.39	34.45	0.46	3.10	250	10.22	34.21	1.78		26.32	177.	0.7531
706	5.29	34.46	0.42	3.14	300	9.29	34.29	1.17		26.54	157.	0.8364
720	5.21	34.45	0.43	2.96	400	7.95	34.43	0.38		26.85	127.	0.9784
770	4.94	34.49	0.50	3.20	500	6.70	34.44	0.37		27.04	110.	1.0972
820	4.79	34.48	0.52	3.30	600	5.85	34.44	0.40		27.15	100.	1.2024
917	4.44	34.50	0.61	3.22	700	5.31	34.46	0.43		27.23	93.	1.2990
1129	3.72	34.54	0.88	3.12	800	4.86	34.49	0.49		27.31	86.	1.3886
1454	2.87	34.59	1.35	2.90	1000	4.17	34.52	0.75		27.41	77.	1.5524
					1200	3.52	34.55	0.97		27.50	69.	1.6984
					1500	(2.79)	(34.60)	(1.40)		(27.61)	(59.)	(1.8895)
325	U. S. S. SERRANO; June 1, 1949; 1517 GCT; 18°10'N, 135°51'W; sounding, 2,900 fm; wind, 050°, force 2; weather, fog; sea, moderate; wire angle, 20°, 15°.											
0	22.78	34.53	4.91	0.30	0	22.78	34.53	4.91		23.66	424.	0.0000
56	22.43	34.53	4.91	0.31	10	22.78	34.53	4.91		23.66	425.	0.0424
112	19.39	34.55	4.63	0.45	20	22.78	34.53	4.91		23.66	425.	0.0849
160	16.11	34.39	3.96	0.73	30	22.72	34.53	4.91		23.68	424.	0.1273
227	10.78	34.14	2.91	1.67	50	22.50	34.53	4.91		23.74	419.	0.2115
458	7.08	34.43	0.35	3.00	75	21.55	34.54	4.83		24.01	393.	0.3130
678	5.57	34.48	0.42	3.16	100	20.20	34.55	4.72		24.39	359.	0.4070
734	5.30	34.49	0.46	3.24	150	17.25	34.43	4.13		25.04	298.	0.5711
779	5.11	34.49	0.45	3.12	200	12.15	34.21	3.32		25.97	209.	0.6979
791	5.04	34.50	0.47	-	250	10.16	34.16	2.49		26.29	179.	0.7951
835	4.88	34.51	0.50	3.10	300	9.08	34.23	1.74		26.52	158.	0.8793
892	4.60	34.49	0.60	3.10	400	7.67	34.36	0.71		26.84	128.	1.0223
949	4.39	34.51	0.65	3.16	500	6.72	34.44	0.35		27.04	111.	1.1418
1005	4.27	34.54	0.75	3.06	600	6.00	34.46	0.38		27.15	101.	1.2475
1120	3.85	34.54	0.92	3.02	700	5.47	34.49	0.44		27.24	93.	1.3442
1349	3.19	34.55	1.20	2.98	800	5.01	34.49	0.48		27.29	88.	1.4346
1697	2.55	34.57	1.60	2.94	1000	4.28	34.54	0.74		27.41	77.	1.5998
					1200	3.61	34.54	1.01		27.48	71.	1.7478
					1500	2.89	34.56	1.36		27.57	63.	1.9482

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	

U. S. S. SERRANO; June 1, 1949; 2320 GCT; 18°18'N, 136°46'W; sounding, 2,900 fm; wind, 050°, force 2; weather, cloudy; sea, slight; wire angle, 30°, 22°. 326

0	22.50	34.51	4.94	0.28	0	22.50	34.51	4.94	23.73	418.	0.0000
54	21.28	34.48	4.84	0.32	10	22.50	34.50	4.92	23.72	419.	0.0419
107	16.24	34.48	3.79	0.77	20	22.44	34.50	4.91	23.73	418.	0.0838
161	12.10	34.13	2.93	1.42	30	22.28	34.49	4.90	23.77	415.	0.1254
215	9.89	34.14	2.74	1.80	50	22.28	34.48	4.86	23.77	416.	0.2085
436	6.72	34.32	0.53	2.94	75	19.50	34.48	4.60	24.51	345.	0.3037
649	5.62	34.43	0.58	3.12	100	17.00	34.48	4.03	25.13	287.	0.3828
706	5.34	34.46	0.42	3.26	150	12.61	34.14	3.00	25.82	222.	0.5101
725	5.22	34.46	0.46	3.18	200	10.37	34.13	2.79	26.23	184.	0.6116
761	5.04	34.46	0.54	3.12	250	9.10	34.16	2.30	26.46	162.	0.6982
780	4.92	34.47	0.61	3.06	300	8.22	34.21	1.74	26.64	146.	0.7753
834	4.69	34.48	0.68	3.12	400	7.03	34.29	0.76	26.88	124.	0.9105
888	4.49	34.48	0.53	3.12	500	6.37	34.36	0.54	27.02	112.	1.0285
941	4.32	34.49	0.71	3.14	600	5.90	34.40	0.57	27.11	104.	1.1362
1046	3.91	34.51	-	3.12	700	5.37	34.46	0.43	27.23	94.	1.2350
1267	3.38	34.54	1.20	3.00	800	4.83	34.47	0.64	27.30	87.	1.3255
1609	2.64	34.58	1.63	2.84	1000	4.11	34.50	0.82	27.40	78.	1.4911
					1200	3.57	34.53	1.11	27.48	71.	1.6401
					1500	2.90	34.57	1.45	27.57	62.	1.8399

U. S. S. SERRANO; June 2, 1949; 1517 GCT; 18°43'N, 139°20'W; sounding, 2,950 fm; wind, 070°, force 2; weather, slight rain; sea, moderate; wire angle, 45°, 35°. 327

0	22.83	34.59	4.79	0.37u	0	22.83	34.59	4.79	23.69	421.	0.0000
48	22.45	34.66	4.80	0.26	10	22.78	34.60	4.79	23.71	420.	0.0421
96	20.00	34.78	5.02	0.25	20	22.72	34.62	4.79	23.75	417.	0.0839
145	18.30	34.73	4.41	0.45	30	22.72	34.63	4.79	23.75	417.	0.1256
195	13.83	34.16	3.86	0.87	50	22.44	34.67	4.81	23.86	407.	0.2079
395	7.69	34.29	0.95	2.68	75	21.61	34.73	4.91	24.14	381.	0.3064
594	6.35	34.45	0.37	2.88	100	19.80	34.78	5.01	24.67	332.	0.3956
599	6.30	34.44	0.37	2.94	150	17.85	34.72	4.37	25.11	291.	0.5513
616	6.11	34.45	0.44	3.02	200	13.47	34.16	3.78	25.67	238.	0.6835
654	5.89	34.45	0.40	2.88	250	11.06	34.19	2.98	26.16	192.	0.7911
655	5.87	34.46	0.46	2.98	300	9.42	34.23	2.14	26.47	163.	0.8800
695	5.61	34.47	0.43	2.92	400	7.66	34.29	0.93	26.79	133.	1.0282
711	5.55	34.46	0.45	2.98	500	6.90	34.40	0.57	26.98	116.	1.1528
736	5.36	34.46	0.50	2.88	600	6.20	34.44	0.37	27.11	105.	1.2632
820	4.96	34.51	0.56	2.98	700	5.59	34.47	0.44	27.21	96.	1.3635
1003	4.17	-	0.77	3.08	800	5.04	34.50	0.53	27.30	98.	1.4553
1291	3.41	-	1.12	3.02	1000	4.20	-	0.75	-	-	-
					1200	3.56	-	1.00	-	-	-

U. S. S. SERRANO; June 2, 1949; 2307 GCT; 18°51'N, 140°14'W; sounding, 2,990 fm; wind, 060°, force 2; weather, overcast; sea, moderate; wire angle, 60°, 45°. 328

0	22.67	34.65	4.83	0.32	0	22.67	34.65	4.83	23.79	412.	0.0000
40	22.42	34.64	4.87	0.40	10	22.67	34.65	4.83	23.79	412.	0.0412
79	20.60	34.87	4.98	0.30	20	22.60	34.64	4.84	23.80	412.	0.0824
116	18.63	34.70	4.56	0.45	30	22.48	34.64	4.85	23.83	409.	0.1235
153	14.97	34.31	3.82	0.90	50	22.40	34.67	4.90	23.88	406.	0.2050
316	8.57	34.23	1.77	2.46	75	20.98	34.86	4.98	24.27	370.	0.3019
491	6.65	34.38	0.57	3.08	100	19.50	34.77	4.80	24.74	325.	0.3887
505	6.52	34.38	0.41	3.12	150	15.45	34.37	3.90	25.41	262.	0.5357
536	6.45	34.42	0.47	3.02	200	11.70	34.26	3.10	26.09	198.	0.6507
544	6.34	34.42	0.39	3.08	250	9.88	34.24	2.48	26.40	169.	0.7423
587	6.12	34.42	0.42	3.06	300	8.81	34.23	1.93	26.56	154.	0.8229
590	6.08	34.42	0.42	3.28	400	7.49	34.30	1.03	26.82	130.	0.9648
631	5.85	34.43	0.41	3.30	500	6.59	34.38	0.53	27.01	113.	1.0865
673	5.72	34.45	0.37	3.14	600	6.04	34.42	0.42	27.11	104.	1.1952
751	5.26	34.47	0.52	3.22	700	5.52	34.46	0.43	27.21	96.	1.2950
929	4.53	34.48	0.68	3.22	800	5.07	34.48	0.55	27.28	90.	1.3876
1209	3.60	34.54	1.06	3.10	1000	4.28	34.49	0.77	27.37	81.	1.5584
					1200	3.63	34.54	1.04	27.48	71.	1.7106

	OBSERVED					INTERPOLATED					COMPUTED		
	Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m
329	U. S. S. SERRANO; June 3, 1949; 1518 GCT; 19°10'N, 142°50'W; sounding, 2,980 fm; wind, 090°, force 2; weather, partly cloudy; sea, moderate; wire angle, 30°, 25°.												
	0	21.94	35.02	4.88	0.37	0	21.94	35.02	4.88		24.27	366.	0.0000
	48	21.49	35.03	4.80	0.32	10	21.94	35.02	4.85		24.27	367.	0.0366
	96	20.25	35.11	4.75	0.37	20	21.94	35.03	4.83		24.28	366.	0.0732
	145	20.01	35.17	4.65	0.31	30	21.94	35.03	4.82		24.28	367.	0.1098
	192	18.69	34.97	4.47	0.51	50	21.35	35.03	4.79		24.44	352.	0.1816
	389	8.03	34.28	1.32	2.71	75	20.46	35.07	4.77		24.71	327.	0.2664
	588	6.02	34.42	0.45	3.13	100	20.20	35.12	4.75		24.82	317.	0.3469
	635	5.77	34.43	0.47	3.13	150	19.99	35.16	4.63		24.91	311.	0.5040
	647	5.79	34.41	0.46	2.97	200	17.85	34.94	4.39		25.28	277.	0.6509
	686	5.43	34.43	0.49	3.23	250	13.92	34.72	3.38		26.02	208.	0.7721
	697	5.46	34.43	0.52	3.07	300	11.00	34.52	2.46		26.42	168.	0.8662
	749	5.23	34.43	0.55	3.03	400	7.89	34.28	1.23		26.75	138.	1.0192
	799	4.89	34.44	0.62	3.13	500	6.75	34.35	0.64		26.96	118.	1.1468
	845	4.73	34.45	0.64	3.11	600	5.99	34.42	0.43		27.12	104.	1.2574
	936	4.41	34.49	0.73	3.17	700	5.46	34.43	0.52		27.19	97.	1.3577
	1138	3.81	34.52	0.93	3.11	800	4.89	34.44	0.62		27.27	90.	1.4513
	1437	2.99	34.54	1.33	2.99	1000	4.24	34.50	0.78		27.39	80.	1.6213
						1200	3.63	34.52	0.98		27.46	72.	1.7735
						1500	(2.85)	(34.54)	(1.42)		(27.55)	(64.)	(1.9781)
330	U. S. S. SERRANO; June 3, 1949; 2317 GCT; 19°10'N, 143°41'W; sounding, 2,900 fm; wind, 090°, force 2; weather, cloudy; sea, moderate; wire angle, 38°, 30°.												
	0	23.28	34.65	4.83	0.35	0	23.28	34.65	4.83		23.61	429.	0.0000
	49	21.62	34.98	4.98	0.29	10	23.22	34.73	4.87		23.69	422.	0.0426
	97	20.05	35.00	4.96	0.30	20	23.06	34.80	4.90		23.79	413.	0.0844
	146	19.73	35.09	4.90	0.30	30	22.06	34.89	4.93		24.14	380.	0.1241
	195	18.41	34.90	4.65	0.37	50	21.60	34.98	4.98		24.33	362.	0.1983
	293	10.08	34.06	3.52	1.64	75	20.65	35.02	4.98		24.62	335.	0.2855
	391	7.54	34.09	2.08	2.43	100	20.04	35.05	4.96		24.81	318.	0.3672
	585	5.95	34.29	0.63	3.23	150	19.65	35.08	4.89		24.93	308.	0.5239
	586	5.98	34.35	0.56	3.15	200	18.01	34.88	4.61		25.20	285.	0.6721
	632	5.85	34.37	0.53	3.09	250	13.20	34.41	4.11		25.92	216.	0.7973
	644	5.61	34.36	0.58	3.15	300	9.81	34.06	3.44		26.27	182.	0.8968
	679	5.58	34.38	0.55	3.19	400	7.48	34.10	1.94		26.66	145.	1.0602
	727	5.28	34.39	0.59	3.27	500	6.53	34.17	1.00		26.85	128.	1.1965
	825	4.91	34.44	0.68	3.31	600	5.96	34.32	0.58		27.04	111.	1.3157
	922	4.46	34.43	0.74	3.31	700	5.43	34.39	0.57		27.16	100.	1.4208
	1130	3.84	34.51	1.01	3.35	800	5.00	34.42	0.65		27.24	93.	1.5171
	1450	3.00	34.55	1.39	3.15	1000	4.17	34.46	0.83		27.36	82.	1.6921
						1200	3.73	34.52	1.08		27.45	74.	1.8475
						1500	(2.75)	(34.56)	(1.46)		(27.58)	(61.)	(2.0497)
331	U. S. S. SERRANO; June 4, 1949; 1520 GCT; 19°10'N, 146°22'W; sounding, 2,920 fm; wind, 060°, force 2; weather, cloudy; sea, moderate; wire angle, 30°, 15°.												
	0	22.78	35.01	4.84	0.29	0	22.78	35.01	4.84		24.02	390.	0.0000
	27	22.65	34.98	4.77	0.28	10	22.72	35.00	4.80		24.03	389.	0.0390
	54	22.57	34.99	4.83	0.30	20	22.69	34.99	4.77		24.04	389.	0.0779
	108	20.90	35.17	4.89	0.33	30	22.63	34.98	4.77		24.04	389.	0.1168
	220	16.37	34.60	4.08	0.70	50	22.59	34.99	4.82		24.06	388.	0.1945
	322	9.99	34.07	3.49	1.65	75	21.78	35.03	4.86		24.32	364.	0.2885
	383	8.00	34.08	2.53	2.21	100	21.00	35.10	4.88		24.59	339.	0.3765
	559	5.76	34.08	0.73	3.05	150	19.70	34.97	4.61		24.84	317.	0.5407
	626	5.63	34.36	0.56	3.11	200	17.70	34.71	4.22		25.14	290.	0.6925
	695	5.58	34.40	0.51	3.07	250	13.45	34.39	3.90		25.85	223.	0.8205
	767	5.16	34.39	0.64	3.15	300	10.87	34.10	3.61		26.12	197.	0.9253
	814	4.95	34.44	0.69	3.07	400	7.65	34.08	2.25		26.63	149.	1.0980
	880	4.72	34.43	0.77	3.21	500	6.12	34.08	1.10		26.83	129.	1.2369
	1103	4.04	34.47	0.87	3.11	600	5.69	34.29	0.60		27.05	109.	1.3560
						700	5.41	34.40	0.52		27.17	99.	1.4599
						800	5.02	34.42	0.67		27.24	93.	1.5558
						1000	4.34	34.45	0.82		27.33	85.	1.7340

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	
U. S. S. SERRANO; June 4, 1949; 2317 GCT; 19°10'N, 147°17'W; sounding, 2,780 fm; wind, 060°, force 2; weather, partly cloudy; sea, smooth; wire angle, 35°, 25°.													332
0	23.22	34.88	4.82	-	0	23.22	34.88	4.82		23.80	411.	0.0000	
25	22.53	34.90	4.91	0.42	10	23.17	34.89	4.85		23.82	409.	0.0410	
49	22.48	34.89	4.97	0.31	20	22.67	34.90	4.89		23.97	395.	0.0812	
98	20.95	35.05	5.02	0.28	30	22.51	34.90	4.92		24.02	391.	0.1205	
192	19.36	35.03	4.79	0.35	50	22.41	34.89	4.97		24.04	390.	0.1987	
283	11.30	34.21	3.70	0.46	75	21.51	34.96	5.01		24.34	362.	0.2927	
386	8.59	34.10	1.63	1.84	100	20.94	35.05	5.02		24.57	341.	0.3806	
495	7.04	34.26	0.74	2.88	150	20.21	35.04	4.95		24.76	325.	0.5472	
536	6.60	34.31	0.64	3.08	200	17.50	34.95	4.73		25.37	268.	0.6954	
550	6.47	34.28	0.70	3.02	250	12.91	34.45	4.19		26.00	208.	0.8142	
589	6.35	34.32	0.58	3.02	300	10.79	34.18	3.42		26.20	190.	0.9135	
640	5.96	34.33	0.59	3.24	400	8.34	34.12	1.46		26.55	156.	1.0863	
691	5.50	34.36	0.65	3.24	500	7.00	34.27	0.73		26.87	127.	1.2278	
743	5.27	34.36	0.79	3.28	600	6.29	34.32	0.57		27.00	115.	1.3487	
794	5.05	34.35	0.70	3.22	700	5.46	34.36	0.73		27.13	102.	1.4573	
995	4.27	34.43	0.88	3.18	800	5.02	34.35	0.70		27.18	99.	1.5577	
					1000	(4.23)	(34.43)	(0.88)		(27.33)	(85.)	(1.7411)	
U. S. S. SERRANO; June 6, 1949; 0113 GCT; 20°58'N, 150°19'W; sounding, missing; wind, 050° force 3; weather, partly cloudy; sea, smooth; wire angle, 37°, 20°.													333
0	23.50	34.73	4.84	-	0	23.50	34.73	4.84		23.61	430.	0.0000	
27	23.32	34.72	4.69	0.29	10	23.45	34.73	4.77		23.62	429.	0.0429	
54	22.78	34.95	4.88	0.27	20	23.39	34.72	4.71		23.63	428.	0.0857	
108	21.52	35.11	4.86	0.24	30	23.30	34.72	4.71		23.66	426.	0.1284	
216	16.92	34.57	3.84	0.77	50	22.90	34.90	4.87		23.91	403.	0.2113	
322	10.56	34.21	2.25	2.20	75	22.30	35.03	4.88		24.18	378.	0.3089	
429	7.53	34.09	2.12	2.45	100	21.63	35.09	4.86		24.41	357.	0.4007	
534	5.72	34.12	1.15	2.99	150	19.95	34.98	4.57		24.78	323.	0.5706	
541	5.83	34.13	1.04	2.95	200	17.70	34.65	4.01		25.10	294.	0.7248	
584	5.61	34.23	0.65	3.13	250	14.12	34.42	3.32		25.74	234.	0.8567	
599	5.38	34.21	0.63	3.15	300	11.47	34.27	2.50		26.14	195.	0.9639	
633	5.19	34.26	0.62	3.21	400	8.20	34.10	2.22		26.56	156.	1.1392	
683	4.92	34.34	0.59	3.21	500	6.32	34.10	2.18		26.82	130.	1.2821	
736	4.87	34.37	0.62	3.27	600	5.38	34.21	0.63		27.03	111.	1.4029	
793	4.68	34.40	0.69	3.27	700	4.89	34.35	0.60		27.19	96.	1.5064	
1002	4.01	34.53	1.05	3.15	800	4.64	34.40	0.65		27.26	90.	1.5993	
1541	2.73	34.60	1.59	3.05	1000	4.01	34.53	1.04		27.43	75.	1.7643	
					1200	3.57	34.56	1.24		27.50	69.	1.9079	
					1500	2.85	34.60	1.54		27.60	60.	2.1005	
U. S. S. SERRANO; June 6, 1949; 1518 GCT; 21°05'N, 152°16'W; sounding, 2,800 fm; wind, 030° force 2; weather, cloudy; sea, slight; wire angle, 30°, 20°.													334
0	23.61	35.00	4.58	-	0	23.61	35.00	4.58		23.78	413.	0.0000	
26	23.51	34.95	4.76	0.21	10	23.58	34.98	4.67		23.77	414.	0.0414	
52	23.40	34.97	4.81	0.28	20	23.52	34.95	4.73		23.77	415.	0.0829	
104	21.97	35.04	4.79	0.28	30	23.50	34.95	4.78		23.77	415.	0.1244	
208	18.82	35.03	4.40	0.37	50	23.41	34.97	4.81		23.81	412.	0.2071	
313	11.76	34.17	4.11	1.08	75	22.91	35.00	4.80		23.98	397.	0.3082	
419	8.46	34.10	2.78	2.03	100	22.15	35.03	4.79		24.22	375.	0.4047	
526	6.20	34.11	1.43	2.79	150	21.00	35.04	4.63		24.54	346.	0.5848	
540	6.09	34.12	1.21	2.79	200	19.30	35.03	4.42		24.99	305.	0.7474	
581	5.37	34.15	1.07	2.97	250	15.10	34.77	4.30		25.79	229.	0.8808	
590	5.62	34.17	0.95	2.95	300	12.30	34.22	4.17		25.95	214.	0.9915	
642	5.11	34.22	0.73	3.03	400	8.96	34.11	3.02		26.45	167.	1.1821	
693	4.81	34.28	0.63	3.17	500	6.79	34.10	1.73		26.76	137.	1.3337	
743	4.68	34.35	0.67	3.21	600	5.53	34.18	0.91		26.99	115.	1.4596	
795	4.53	34.40	0.79	3.15	700	4.80	34.29	0.63		27.16	99.	1.5667	
998	4.04	34.51	1.02	3.15	800	4.52	34.40	0.80		27.28	89.	1.6606	
1524	2.82	34.56	1.51	3.29	1000	4.04	34.51	1.02		27.41	77.	1.8260	
					1200	3.47	34.54	1.14		27.51	68.	1.9704	
					1500	2.88	34.56	1.47		27.57	63.	2.1663	

USNEL

CRUISE III

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m

335 U. S. S. SERRANO; June 6, 1949; 2318 GCT; 21°09'N, 153°26'W; sounding, 2,830 fm; wind, 030°, force 2; weather, partly cloudy; sea, smooth; wire angle, 30°, 17°.

0	23.89	35.02	4.70	-	0	23.89	35.02	4.70	23.71	420.	0.0000
26	23.46	35.00	4.83	0.28	10	23.75	35.01	4.75	23.74	417.	0.0419
51	23.13	35.00	4.88	0.31	20	23.60	35.01	4.80	23.79	413.	0.0834
102	22.04	35.01	4.84	0.27	30	23.42	35.00	4.84	23.83	409.	0.1245
207	19.18	34.99	4.28	0.86	50	23.20	34.97	4.88	23.87	406.	0.2060
310	12.79	34.33	4.45	1.03	75	22.48	34.98	4.88	24.09	387.	0.3051
414	8.30	34.11	3.28	2.26	100	22.11	35.01	4.86	24.21	375.	0.4003
517	6.55	34.20	1.64	2.70	150	21.02	35.01	4.59	24.52	348.	0.5812
537	6.15	34.14	1.40	2.78	200	19.49	34.99	4.30	24.91	313.	0.7464
568	5.83	34.21	1.10	2.96	250	17.10	34.74	4.35	25.31	275.	0.8933
587	5.43	34.17	1.04	2.92	300	13.39	34.40	4.44	25.87	222.	1.0176
636	5.15	34.21	0.81	3.08	400	8.70	34.11	3.51	26.49	162.	1.2098
687	4.81	34.27	0.63	3.28	500	6.92	34.13	1.90	26.77	136.	1.3591
737	4.68	34.34	0.64	3.20	600	5.37	34.18	0.98	27.00	113.	1.4838
781	4.68	34.43	0.79	3.40	700	4.76	34.29	0.63	27.16	99.	1.5897
994	4.12	34.55	1.08	3.10	800	4.64	34.45	0.81	27.30	86.	1.6821
1520	2.90	34.58	1.50	3.02	1000	4.11	34.55	1.07	27.44	75.	1.8431
					1200	3.49	34.56	1.22	27.51	68.	1.9857
					1500	2.91	34.58	1.48	27.58	62.	2.1804

336 U. S. S. SERRANO; June 10, 1949; 1516 GCT; 23°30'N, 157°40'W; sounding, 2,500 fm; wind, 040°, force 2; weather, cloudy; sea, smooth; wire angle, 32°, 25°.

0	(25.56)	34.89	4.77	-	0	(25.56)	34.89	4.77	23.11	477.	0.0000
24	24.49	34.90	4.77	0.25	10	25.02	34.89	4.77	23.27	462.	0.0469
46	23.68	35.02	4.84	-	20	24.64	34.90	4.77	23.40	450.	0.0925
91	22.04	35.17	4.86	0.22	30	24.29	34.90	4.79	23.50	441.	0.1371
200	17.74	34.79	4.13	0.54	50	23.53	35.05	4.84	23.84	409.	0.2221
277	13.34	34.31	4.04	0.93	75	22.73	35.13	4.85	24.13	382.	0.3211
345	10.44	34.16	4.41r	1.27	100	21.60	35.16	4.81	24.47	351.	0.4128
399	8.43	34.14	3.88	1.73	150	19.48	35.02	4.45	24.93	308.	0.5775
440	7.41	34.07	3.36	-	200	17.74	34.79	4.13	25.19	285.	0.7257
518	6.63	34.04	2.56	2.41	250	15.10	34.47	4.05	25.56	251.	0.8595
568	5.71	34.05	1.93	2.57	300	12.20	34.25	4.16	25.99	210.	0.9746
617	5.12	34.10	1.25	3.05	400	8.42	34.10	3.88	26.53	159.	1.1590
660	4.77	34.22	0.89	3.21	500	6.89	34.04	2.74	26.70	142.	1.3096
718	4.62	34.23	0.71	3.27	600	5.30	34.07	1.46	26.93	121.	1.4412
768	4.47	34.31	0.70	3.35	700	4.63	34.22	0.75	27.12	102.	1.5526
969	3.92	34.50	0.95	3.27	800	4.37	34.36	0.75	27.26	90.	1.6485
1478	2.81	34.64	1.57	3.29	1000	3.86	34.51	0.99	27.43	74.	1.8125
					1200	3.38	34.57	1.17	27.53	66.	1.9529
					1500	(2.77)	(34.64)	(1.60)	(27.64)	(56.)	(2.1356)

337 U. S. S. SERRANO; June 12, 1949; 0111 GCT; 23°50'N, 161°12'W; sounding, 2,600 fm; wind, 050°, force 1; weather, cloudy; sea, smooth; wire angle, 30°, 20°.

0	25.31	35.03			0	25.31	35.03		23.29	460.	0.0000
26	24.11	34.97			10	25.00	35.01		23.37	453.	0.0456
52	23.52	35.02			20	24.50	34.98		23.50	441.	0.0903
105	22.22	35.11			30	24.03	34.97		23.63	428.	0.1338
213	18.94	34.97			50	23.60	35.02		23.80	413.	0.2180
316	13.70	34.43			75	22.93	35.06		24.02	393.	0.3188
416	10.54	34.21			100	22.36	35.10		24.21	375.	0.4149
519	7.51	34.23			150	21.20	35.05		24.50	350.	0.5963
537	7.11	34.04			200	19.60	34.99		24.86	317.	0.7630
571	6.21	34.04			250	16.81	34.83		25.45	262.	0.9076
588	6.01	34.05			300	14.37	34.52		25.76	233.	1.0313
638	5.57	34.09			400	11.00	34.24		26.20	191.	1.2433
686	5.10	34.14			500	7.97	34.07		26.57	156.	1.4168
734	4.98	34.23			600	5.90	34.06		26.85	129.	1.5592
783	4.74	34.29			700	5.04	34.16		27.03	112.	1.6795
984	4.03	34.44			800	4.69	34.31		27.18	98.	1.7841
1503	2.79	34.57			1000	4.00	34.45		27.37	81.	1.9623
					1200	3.39	34.50		27.47	71.	2.1141
					1500	2.80	34.57		27.58	61.	2.3127

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	
U. S. S. SERRANO; June 13, 1949; 0113 GCT; 25°42'N, 160°20'W; sounding, 2,731 fm; wind, 090°, force 3; weather, cloudy; sea, slight; wire angle, 15°, 5°.													338
0	25.77	35.22	4.83		0	25.77	35.22	4.83		23.29	460.	0.0000	
29	24.44	35.18	4.04r		10	25.72	35.21	4.84		23.30	459.	0.0459	
58	22.76	35.31	4.92		20	25.66	35.19	4.84		23.30	459.	0.0918	
115	20.98	35.31	4.94		30	24.44	35.18	4.85		23.67	425.	0.1360	
231	14.58	34.53	4.58		50	23.10	35.29	4.88		24.14	380.	0.2165	
346	10.85	34.22	4.62		75	22.01	35.31	4.90		24.47	350.	0.3077	
441	8.64	34.12	4.05		100	21.30	35.31	4.93		24.67	332.	0.3930	
577	6.06	33.99	2.50		150	19.99	35.15	4.87		24.90	312.	0.5540	
635	5.22	34.06	1.63		200	16.30	34.77	4.71		25.52	253.	0.6952	
717	4.56	34.13	0.91		250	13.90	34.45	4.58		25.80	227.	0.8153	
774	4.24	34.20	0.61		300	12.20	34.30	4.60		26.03	206.	0.9237	
831	4.13	34.22	0.54		400	9.59	34.16	4.36		26.39	173.	1.1134	
887	3.93	34.28	0.49		500	7.41	34.05	3.42		26.64	149.	1.2743	
941	3.74	34.37	0.54		600	5.70	34.01	2.10		26.83	130.	1.4138	
995	3.64	34.40	0.64		700	4.69	34.12	1.02		27.04	110.	1.5340	
1226	3.35	34.49	1.04		800	4.18	34.21	0.56		27.16	99.	1.6386	
1703	2.38	34.60	1.84		1000	3.62	34.40	0.65		27.37	80.	1.8172	
					1200	3.40	34.48	1.00		27.45	73.	1.9698	
					1500	2.83	34.56	1.49		27.57	62.	2.1723	
U. S. S. SERRANO; June 13, 1949; 1516 GCT; 26°32'N, 158°10'W; sounding, 2,740 fm; wind, 080°, force 2; weather, cloudy; sea, slight; wire angle, 35°, 23°.													339
0	24.17	35.09	4.34	-	0	24.17	35.09	4.34		23.68	423.	0.0000	
25	24.17	35.15	4.83	0.28	10	24.17	35.11	4.46		23.69	422.	0.0422	
50	22.81	35.21	4.92	-	20	24.17	35.14	4.79		23.72	420.	0.0843	
99	21.44	35.27	4.89	-	30	23.90	35.17	4.86		23.82	410.	0.1258	
200	17.86	34.89	4.46	-	50	22.81	35.21	4.92		24.17	378.	0.2046	
301	12.40	34.49	4.61	-	75	21.99	32.25	4.91		24.43	354.	0.2960	
399	10.27	34.20	4.56	-	100	21.43	35.27	4.88		24.60	338.	0.3825	
504	8.28	34.04	3.87	1.60	150	20.38	35.19	4.63		24.83	319.	0.5467	
505	7.75	34.01	3.64	-	200	17.86	34.89	4.46		25.24	280.	0.6964	
551	7.45	34.05	3.38	2.02	250	14.40	34.65	4.54		25.85	223.	0.8222	
558	6.56	34.00	2.76	-	300	12.41	34.49	4.61		26.13	196.	0.9270	
596	6.23	34.02	2.39	2.28	400	10.27	34.20	4.55		26.30	181.	1.1158	
642	5.76	34.03	1.98	2.56	500	8.37	34.05	3.71		26.50	163.	1.2880	
688	5.35	34.07	1.62	2.62	600	6.19	34.01	2.35		26.77	137.	1.4378	
734	4.88	34.12	1.33	2.78	700	5.25	34.06	1.54		26.92	122.	1.5669	
925	3.93	34.24	0.58	-	800	4.36	34.14	0.96		27.09	106.	1.6807	
1419	2.85	34.53	1.41	3.08	1000	3.86	34.29	0.66		27.26	91.	1.8773	
					1200	3.50	34.41	1.02		27.39	79.	2.0471	
					1500	(2.60)	(34.56)	(1.54)		(27.59)	(60.)	(2.2550)	
U. S. S. SERRANO; June 13, 1949; 2321 GCT; 26°57'N, 157°10'W; sounding, 2,810 fm; wind, 090°, force 4; weather, partly cloudy; sea, moderate; wire angle, 28°, 15°.													340
0	24.58	35.24	4.83		0	24.58	35.24	4.83		23.67	423.	0.0000	
27	24.30	35.23	4.39		10	24.58	35.24	4.59		23.67	424.	0.0424	
53	22.62	35.26	4.56		20	24.41	35.23	4.44		23.71	420.	0.0846	
107	21.47	35.29	4.55		30	23.90	35.23	4.41		23.87	406.	0.1259	
216	17.93	35.27	4.12		50	22.78	35.25	4.54		24.21	374.	0.2039	
325	12.84	34.39	4.29		75	22.07	35.27	4.56		24.42	355.	0.2950	
435	9.93	34.17	4.25		100	21.59	34.29	4.55		24.57	341.	0.3820	
546	7.56	34.02	3.53		150	20.50	35.29	4.41		24.87	315.	0.5460	
582	6.67	33.99	3.01		200	18.74	35.28	4.17		25.32	273.	0.6930	
599	6.39	33.98	2.67		250	16.10	35.01	4.15		25.75	233.	0.8195	
637	5.92	33.98	2.28		300	13.84	34.49	4.26		25.85	224.	0.9339	
693	5.21	34.05	1.63		400	10.79	34.23	4.29		26.24	188.	1.1401	
748	4.68	34.10	1.09		500	8.71	34.08	3.92		26.46	167.	1.3175	
804	4.45	34.19	0.70		600	6.38	33.98	2.66		26.72	142.	1.4717	
861	4.21	34.24	0.55		700	5.16	34.06	1.54		26.93	121.	1.6000	
1087	3.55	34.42	0.69		800	4.47	34.19	0.73		27.11	104.	1.7121	
1660	2.47	34.61	1.71		1000	3.69	34.35	0.60		27.32	84.	1.9001	
					1200	3.40	34.47	0.87		27.45	74.	2.0579	
					1500	2.80	34.56	1.36		27.57	62.	2.2610	

USNEL

CRUISE III

OBSERVED					INTERPOLATED					COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m
341	U. S. S. SERRANO; June 14, 1949; 1519 GCT; 27°58.5'N, 153°57'W; sounding, 3,000 fm; wind, 110°, force 2; weather, partly cloudy; sea, smooth; wire angle, 10°, 15°.											
0	23.15	35.39	4.73	-	0	23.15	35.39	4.73		24.21	372.	0.0000
26	22.61	35.35	4.94	0.19	10	23.15	35.38	4.78		24.20	373.	0.0373
51	21.11	35.32	5.21	0.17	20	23.10	35.36	4.87		24.20	374.	0.0747
102	19.40	35.19	5.11	0.20	30	22.37	35.34	4.98		24.39	356.	0.1112
206	13.50	34.34	4.70	0.72	50	21.13	35.32	5.21		24.72	325.	0.1793
310	10.86	34.18	4.75	1.12	75	19.99	35.28	5.18		25.00	300.	0.2574
416	8.96	34.08	4.46	1.57	100	19.46	35.20	5.12		25.07	293.	0.3315
521	6.88	33.94	3.29	2.21	150	16.50	34.60	4.91		25.34	269.	0.4719
573	5.99	33.99	2.61	2.53	200	13.75	34.36	4.72		25.76	229.	0.5964
603	5.72	33.98	2.17	2.61	250	12.30	34.26	4.72		25.98	210.	0.7012
658	5.11	34.05	1.35	2.85	300	11.10	34.19	4.75		26.15	194.	0.8023
713	4.79	34.08	1.00	2.99	400	9.20	34.09	4.55		26.40	172.	0.9853
767	4.48	34.15	0.65	3.23	500	7.42	33.97	3.54		26.57	155.	1.1487
823	4.29	34.21	0.45	3.21	600	5.78	33.98	2.23		26.80	134.	1.2930
878	4.10	34.29	0.41	3.29	700	4.90	34.07	1.06		26.97	117.	1.4181
1097	3.47	34.42	0.63	3.25	800	4.34	34.19	0.50		27.13	102.	1.5275
1648	2.47	34.56	1.56	3.05	1000	3.73	34.39	0.51		27.35	82.	1.7115
					1200	3.20	34.45	0.77		27.45	73.	1.8661
					1500	2.71	34.53	1.23		27.56	63.	2.0698
342	U. S. S. SERRANO; June 14, 1949; 2317 GCT; 28°06'N, 152°53'W; sounding, 2,950 fm; wind, 110°, force 2; weather, partly cloudy; sea, slight; wire angle, 30°, 20°.											
0	23.39	35.39	4.79		0	23.39	35.39	4.79		24.14	379.	0.0000
26	22.61	35.36	4.88		10	23.11	35.38	4.81		24.21	372.	0.0376
52	21.06	35.32	5.14		20	23.11	35.37	4.84		24.20	373.	0.0749
104	20.09	35.27	4.95		30	21.67	35.35	4.94		24.60	336.	0.1104
210	15.27	34.55	4.70		50	21.11	35.33	5.13		24.73	324.	0.1764
316	11.49	34.25	4.67		75	20.75	35.30	5.08		24.81	318.	0.2566
423	9.15	34.08	4.39		100	20.20	35.27	4.98		24.91	306.	0.3346
541	6.64	33.99	3.16		150	19.29	35.14	4.82		25.07	295.	0.4850
552	6.87u	33.96	3.31		200	15.81	34.65	4.72		25.54	251.	0.6216
582	5.97	33.97	2.56		250	13.58	34.32	4.70		25.77	230.	0.7420
592	5.83	34.00	2.38		300	11.96	34.19	4.68		25.99	210.	0.8521
642	5.30	34.04	1.84		400	9.56	34.09	4.47		26.34	178.	1.0459
692	4.92	34.08	1.33		500	7.61	34.02	3.68		26.58	154.	1.2117
744	4.65	34.14	0.84		600	5.78	34.01	2.34		26.82	131.	1.3544
795	4.45	34.17	0.55		700	4.79	34.09	1.24		27.00	114.	1.4770
1003	3.78	34.34	0.47		800	4.44	34.17	0.53		27.10	105.	1.5862
1540	2.71	-	1.31		1000	3.79	34.34	0.47		27.31	86.	1.7770
					1200	3.22	-	0.68		-	-	-
					1500	2.74	-	1.25		-	-	-
343	U. S. S. SERRANO; June 15, 1949; 1517 GCT; 29°04.5'N, 149°44.5'W; sounding, 2,910 fm; wind, 070°, force 2; weather, partly cloudy; sea, smooth; wire angle, 15°, 13°.											
0	22.31	35.46	4.92	-	0	22.31	35.46	4.92		24.50	344.	0.0000
26	22.20	35.36	4.90	0.14	10	22.25	35.43	4.92		24.49	345.	0.0345
52	20.55	35.35	5.16	0.15	20	22.20	35.38	4.90		24.47	348.	0.0691
103	19.80	35.30	5.09	0.19	30	22.20	35.36	4.92		24.46	350.	0.1040
208	15.79	34.60	4.69	0.48	50	20.64	35.35	5.13		24.88	310.	0.1700
313	11.64	34.24	4.88	0.76[a)]	75	19.97	35.33	5.15		25.04	296.	0.2457
419	9.43	34.11	4.68	1.36	100	19.88	35.31	5.10		25.05	296.	0.3196
525	7.11	33.99	3.54	2.06	150	18.37	35.00	4.72		25.20	283.	0.4642
578	6.06	33.99	2.63	2.48	200	16.11	34.65	4.73		25.47	258.	0.5993
595	5.83	34.01	2.37	2.38	250	14.42	34.41	4.80		25.66	241.	0.7240
650	5.18	34.01	1.78	2.52	300	12.29	34.27	4.87		25.99	210.	0.8367
704	4.83	34.06	1.20	2.78	400	9.75	34.13	4.75		26.34	178.	1.0307
759	4.54	34.24	0.84	3.04	500	7.76	34.02	3.88		26.56	156.	1.1978
815	4.22	34.17	0.61	3.00	600	5.77	34.00	2.30		26.81	132.	1.3418
870	4.06	34.23	0.45	3.16	700	4.87	34.06	1.22		26.97	117.	1.4661
1089	3.49	34.36	0.54	3.26	800	4.32	34.16	0.67		27.11	104.	1.5766
1641	2.50	34.55	1.45	3.06	1000	3.77	34.31	0.49		27.28	88.	1.7688
					1200	3.20	34.40	0.66		27.41	76.	1.9334
					1500	2.66	34.50	1.20		27.54	65.	2.1449

a) Value may be 0.96.

OBSERVED					INTERPOLATED					COMPUTED			
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD	
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m	
U. S. S. SERRANO; June 15, 1949; 2317 GCT; 29°24'N, 148°19'W; sounding, 2,800 fm; wind, 070°, force 2; weather, partly cloudy; sea, smooth; wire angle, 25°, 17°.													344
0	22.22	35.33	4.99		0	22.22	35.33	4.99		24.43	351.	0.0000	
26	21.35	35.27	5.08		10	22.19	35.31	5.00		24.42	352.	0.0352	
51	19.82	35.09	5.32		20	22.09	35.29	5.04		24.43	351.	0.0704	
103	18.70	35.09r	5.07		30	21.00	35.26	5.15		24.71	325.	0.1042	
207	14.11	34.39	4.83		50	19.84	35.10	5.32		24.90	308.	0.1675	
309	11.12	34.21	4.85		75	19.12	34.89	5.25		24.93	306.	0.2443	
412	9.07	34.09	4.60		100	18.76	34.80	5.08		24.96	304.	0.3205	
518	6.83	34.00	3.75		150	17.51	34.56	4.93		25.07	294.	0.4700	
570	6.03	33.99	2.72		200	14.75	34.41	4.84		25.59	246.	0.6051	
571	6.00	34.00	2.72		250	12.43	34.30	4.84		25.98	210.	0.7191	
623	5.26	34.02	1.96		300	11.31	34.22	4.85		26.13	196.	0.8205	
676	4.87	34.06	1.56		400	9.63	34.10	4.51		26.33	178.	1.0075	
730	4.48	34.12	1.03		500	7.20	34.01	3.87		26.63	149.	1.1710	
784	4.28	34.19	0.65		600	5.60	34.01	2.26		26.84	129.	1.3100	
838	4.08	34.24	0.45		700	4.69	34.08	1.30		26.99	113.	1.4312	
1054	3.51	34.86r	0.40		800	4.21	34.20	0.61		27.15	100.	1.5377	
1604	2.47	34.61	1.42		1000	3.61	34.32	0.40		27.31	86.	1.7231	
					1200	3.20	34.42	0.60		27.43	75.	1.8835	
					1500	2.63	34.56	1.20		27.59	60.	2.0854	
U. S. S. SERRANO; June 16, 1949; 1516 GCT; 30°00'N, 145°45'W; sounding, 2,650 fm; wind, 040°, force 3; weather, overcast; sea, slight; wire angle, 25°, 30°.													345
0	21.32	35.44	4.92	-	0	21.32	35.44	4.92		24.76	320.	0.0000	
24	21.32	35.44	4.96	0.15	10	21.32	35.44	4.93		24.76	320.	0.0320	
46	20.75	35.33	5.04	0.18	20	21.32	35.44	4.95		24.76	320.	0.0640	
92	18.99	35.17	5.11	0.16	30	21.32	35.43	4.98		24.75	322.	0.0961	
185	15.45	34.60	4.61	0.49	50	20.40	35.31	5.03		24.91	307.	0.1590	
286	11.25	34.21	4.88	0.96	75	19.34	35.21	5.08		25.11	289.	0.2335	
389	9.13	34.09	4.52	1.39	100	18.89	35.15	5.09		25.18	283.	0.3049	
493	7.10	34.02	3.33	2.01	150	17.55	34.87	4.80		25.30	273.	0.4438	
545	6.09	33.98	2.62	2.45	200	14.62	34.50	4.63		25.69	237.	0.5712	
565	5.84	33.98	2.47	2.37	250	12.43	34.30	4.79		25.98	209.	0.6828	
619	5.29	33.99	1.83	2.55	300	10.97	34.19	4.87		26.17	192.	0.7832	
672	4.89	34.05	1.36	2.71	400	8.96	34.09	4.44		26.42	169.	0.9636	
726	4.56	34.13	0.86	2.93	500	6.99	34.01	3.22		26.66	146.	1.1208	
780	4.27	34.19	0.56	3.05	600	5.50	33.99	2.05		26.84	129.	1.2581	
834	4.10	34.24	0.52	3.15	700	4.62	34.09	1.10		27.01	113.	1.3790	
1049	3.50	34.41	0.53	3.23	800	4.21	34.21	0.55		27.16	99.	1.4850	
1591	2.51	34.53	1.44	2.97	1000	3.61	34.38	0.52		27.35	81.	1.6652	
					1200	3.17	34.45	0.69		27.45	72.	1.8188	
					1500	2.74	34.51	1.25		27.55	64.	2.0234	
U. S. S. SERRANO; June 16, 1949; 2319 GCT; 30°07'N, 145°11'W; sounding, 2,700 fm; wind, 040°, force 3; weather, overcast; sea, slight; wire angle, 18°, 17°.													346
0	21.35	35.49	4.95		0	21.35	35.49	4.95		24.79	317.	0.0000	
26	21.35	35.37	4.78		10	21.35	35.44	4.86		24.75	321.	0.0319	
51	20.36	35.23	4.87		20	21.35	35.39	4.80		24.71	325.	0.0642	
102	18.78	35.08	4.95		30	21.29	35.34	4.78		24.69	327.	0.0968	
207	13.69	34.28	4.49		50	20.38	35.24	4.88		24.86	312.	0.1607	
311	10.78	34.19	4.54		75	19.44	35.15	4.93		25.04	295.	0.2365	
417	8.65	34.09	4.12		100	18.83	35.08	4.95		25.15	286.	0.3092	
522	6.89	33.98	3.25		150	16.72	34.70	4.75		25.37	266.	0.4473	
575	5.90	33.98	2.39		200	14.00	34.29	4.50		25.66	239.	0.5737	
591	5.53	33.97	2.00		250	12.31	34.24	4.51		25.96	212.	0.6864	
646	4.96	34.00	1.44		300	11.05	34.20	4.54		26.16	193.	0.7874	
701	4.62	34.04	1.05		400	8.98	34.10	4.20		26.44	168.	0.9675	
756	4.39	34.14	0.69		500	7.27	34.00	3.48		26.62	151.	1.1265	
811	4.22	34.17	0.49		600	5.44	33.97	1.88		26.85	128.	1.2658	
866	4.06	34.22	0.38		700	4.62	34.04	1.06		26.98	115.	1.3875	
1086	3.53	34.36	0.56		800	4.27	34.16	0.51		27.11	103.	1.4969	
1638	2.50	34.52	1.40		1000	3.74	34.31	0.45		27.29	88.	1.6881	
					1200	3.27	34.40	0.66		27.40	77.	1.8529	
					1500	2.69	34.49	1.17		27.53	66.	2.0671	

USNEL

CRUISE III

OBSERVED					INTERPOLATED					COMPUTED		
Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
347	U. S. S. SERRANO; June 17, 1949; 1518 GCT; 30°36'N, 142°43'W; sounding, 2,020 fm; wind, 060°, force 3; weather, overcast; sea, moderate; wire angle, 45°, 37°.											
0	19.68	34.79	4.94	-	0	19.68	34.79	4.94		24.70	325.	0.0000
23	19.68	34.78	-	0.21	10	19.68	34.79	-		24.70	325.	0.0325
46	18.52	34.78	-	0.21	20	19.68	34.78	-		24.70	326.	0.0651
93	17.93	34.91	-	0.22	30	19.68	34.78	-		24.70	327.	0.0977
192	13.50	34.18	4.93	0.60	50	18.40	34.78	-		25.02	296.	0.1600
293	10.03	34.06	4.44	1.19	75	18.04	34.87	-		25.18	282.	0.2323
396	7.96	33.97	4.13	1.75	100	17.90	34.90	-		25.24	277.	0.3022
500u	6.31u	33.95	2.71	2.31	150	16.00	34.36	-		25.28	275.	0.4402
503	6.14	33.93	2.56	2.45	200	13.15	34.17	4.88		25.74	231.	0.5668
550	5.60	33.96	2.13	2.51	250	11.29	34.11	4.47		26.05	202.	0.6752
561	5.29	33.97	1.97	2.71	300	9.90	34.05	4.24		26.25	184.	0.7718
601	5.15	34.00	-	2.73	400	7.85	33.97	4.10		26.51	160.	0.9437
649	4.72	34.01	1.27	2.91	500	6.20	33.93	2.67		26.70	141.	1.0942
698	4.58	34.08	0.81	3.05	600	5.16	34.00	1.68		26.89	124.	1.2269
747	4.45	34.09	0.65	3.15	700	4.57	34.08	0.79		27.01	113.	1.3453
948	3.78	34.32	-	3.29	800	4.30	34.14	0.65		27.09	105.	1.4543
1476	2.74	34.52	1.10	3.11	1000	3.60	34.35	0.77		27.33	83.	1.6431
					1200	3.11	34.42	0.90		27.43	74.	1.8003
					1500	(2.71)	(34.53)	(1.12)		(27.56)	(63.)	(2.0058)
348	U. S. S. SERRANO; June 17, 1949; 2318 GCT; 30°47'N, 141°45'W; sounding, 2,350 fm; wind, 070°, force 5; weather, overcast; sea, moderate; wire angle, 40°, 35°.											
0	19.74	34.91	4.87		0	19.74	34.91	4.87		24.78	318.	0.0000
25	19.74	34.92	5.07		10	19.74	34.91	4.95		24.78	318.	0.0318
48	18.44	34.71	5.31		20	19.74	34.92	5.04		24.79	318.	0.0636
102	17.62	34.85	5.21		30	19.62	34.92	5.15		24.82	315.	0.0952
213	12.74	34.11	4.84		50	18.29	34.71	5.30		25.00	299.	0.1566
323	9.69	34.04	4.56		75	17.84	34.78	5.27		25.16	284.	0.2294
436	8.01	33.99	3.92		100	17.64	34.85	5.22		25.26	275.	0.2993
504	6.29	33.99	2.05		150	16.04	34.57	5.06		25.43	261.	0.4332
547	5.74	34.02	1.86		200	13.34	34.18	4.89		25.71	234.	0.5570
551	5.70	34.01	1.67		250	11.51	34.07	4.75		25.98	209.	0.6680
590	5.32	34.04	1.21		300	10.19	34.04	4.62		26.19	190.	0.7677
599	5.25	34.07	1.35		400	8.66	34.00	4.16		26.41	170.	0.9474
645	4.99	34.15	0.85		500	6.37	33.99	2.80		26.73	139.	1.1018
691	4.76	34.17	0.73		600	5.25	34.07	1.13		26.93	120.	1.2314
737	4.49	34.22	0.52		700	4.70	34.18	0.62		27.08	106.	1.3445
923	3.80	34.41	0.43		800	4.16	34.29	0.47		27.23	92.	1.4437
1395	2.93	34.56	1.11		1000	3.70	34.44	0.50		27.39	78.	1.6139
					1200	3.37	34.50	0.64		27.47	71.	1.7627
349	U. S. S. SERRANO; June 18, 1949; 1516 GCT; 31°11.5'N, 139°12'W; sounding, 2,650 fm; wind, 060°, force 3; weather, overcast; sea, slight; wire angle, 25°, 18°.											
0	18.83	34.56	4.99	-	0	18.83	34.56	4.99		24.75	321.	0.0000
26	18.80	34.48	5.18	0.25	10	18.89	34.53	5.06		24.71	325.	0.0323
50	17.17	34.47	5.47	0.25	20	19.06	34.50	5.15		24.64	331.	0.0651
102	16.61	34.05	5.35	0.24	30	18.20	34.48	5.25		24.84	313.	0.0973
207	14.34	34.04	4.95	0.49	50	17.17	34.47	5.47		25.09	290.	0.1575
311	10.05	34.02	4.54	1.20	75	16.75	34.46	5.44		25.18	282.	0.2290
418	8.29	34.60r	3.78	1.71	100	16.61	34.45	5.36		25.20	280.	0.2993
523	6.65	34.30r	2.85	2.21	150	16.09	34.39	5.19		25.30	273.	0.4376
561	5.89	34.04	2.02	2.61	200	14.64	34.05	4.98		25.34	270.	0.5733
576	5.72	34.07	2.00	2.39	250	12.07	34.03	4.78		25.84	222.	0.6964
613	5.28	34.04	1.45	2.73	300	10.32	34.02	4.58		26.15	193.	0.8003
664	5.08	34.02	0.93	2.91	400	8.47	34.02	3.92		26.45	165.	0.9795
716	4.74	34.13	0.66	3.07	500	7.10	34.04	3.09		26.66	146.	1.1352
768	4.46	34.22	0.62	3.11	600	5.41	34.05	1.64		26.90	123.	1.2699
820	4.22	34.25	0.47	3.15	700	4.84	34.09	0.71		26.99	114.	1.3888
1027	3.57	34.42	0.33	3.19	800	4.32	34.24	0.52		27.17	98.	1.4951
1554	2.63	34.50	1.21	3.05	1000	3.63	34.38	0.33		27.35	81.	1.6747
					1200	3.22	34.45	0.52		27.45	73.	1.8291
					1500	2.76	34.53	1.10		27.55	64.	2.0343

U. S. S. SERRANO; June 18, 1949; 2317 GCT; 31°19'N, 138°13'W; sounding, 2,470 fm; wind, 050°, force 3; weather, cloudy; sea, slight; wire angle, 50°, 30°. 350

OBSERVED Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	INTERPOLATED Z m	T °C	S ‰	O_2 ml/L	PO_4-P μg at/L	COMPUTED σ_t g/L	δ $10^5 cm^3/g$	ΔD dyn. m
0	19.00	34.46	4.85		0	19.00	34.46	4.85		24.63	332.	0.0000
24	19.01	34.43	4.92		10	19.00	34.45	4.88		24.62	333.	0.0333
47	17.70	34.48	5.23		20	19.00	34.43	4.90		24.61	335.	0.0667
94	16.30	34.44	5.24		30	18.99	34.43	5.02		24.61	335.	0.1002
190	12.85	34.02	4.75		50	17.53	34.48	5.23		25.01	298.	0.1635
283	9.38	34.04u	4.26		75	16.69	34.46	5.24		25.19	281.	0.2358
378	7.81	33.99u	3.79		100	16.24	34.43	5.22		25.27	274.	0.3051
418	7.01	34.00u	2.88		150	15.18	34.30	4.96		25.41	262.	0.4389
464	6.31	34.00u	2.31		200	12.43	34.02	4.69		25.77	229.	0.5615
479	6.14	33.96u	2.23		250	10.40	34.03	4.42		26.15	193.	0.6669
511	5.85	34.01u	1.96		300	9.07	34.03	4.16		26.37	172.	0.7582
530	5.64	33.95u	1.90		400	7.33	33.99	3.40		26.60	151.	0.9197
559	5.46	34.02	1.75		500	5.97	33.99	2.04		26.78	134.	1.0620
563u	5.18u	34.06	1.40		600	5.13	34.12	1.26		26.99	115.	1.1863
607	5.09	34.13	1.19		700	4.80	34.17	-		27.06	108.	1.2977
666	4.89	34.26u	0.67		800	4.44	34.20	-		27.13	103.	1.4029
858	4.20	34.05u	1.47									

U. S. S. SERRANO; June 19, 1949; 1516 GCT; 31°25'N, 135°14'W; sounding, 2,400 fm; wind, 050°, force 3; weather, overcast; sea, missing; wire angle, 25°, 15°. 351

0	18.38	34.25	5.32u	-	0	18.38	34.25	5.32		24.62	333.	0.0000
26	18.33	34.15	5.19	0.29	10	18.36	34.21	5.25		24.60	335.	0.0334
51	17.42	34.30	5.48	0.27	20	18.33	34.16	5.20		24.57	339.	0.0671
103	15.43	34.14	5.34	0.30	30	18.32	34.17	5.22		24.58	338.	0.1009
207	10.24	33.88	4.59	1.14	50	17.44	34.30	5.47		24.89	309.	0.1656
311	8.26	33.96	3.40	1.83	75	16.81	34.22	5.43		24.98	301.	0.2418
416	6.45	34.04	2.19	2.49	100	15.68	34.15	5.35		25.19	282.	0.3147
521	5.69	34.16	0.93	2.87	150	12.00	34.01	5.06		25.84	220.	0.4403
555	5.53	34.20	0.72	2.95	200	10.40	33.89	4.66		26.04	202.	0.5459
573	5.49	34.19	0.72	2.93	250	9.50	33.91	4.13		26.21	187.	0.6432
607	4.92r	34.16	0.73	2.99	300	8.50	33.95	3.53		26.40	169.	0.7323
659	4.87	34.26	0.49	3.11	400	6.66	34.03	2.37		26.72	139.	0.8862
711	4.49	34.31	0.45	3.17	500	5.82	34.13	1.17		26.91	121.	1.0162
763	4.34	34.33	0.37	3.19	600	5.36	34.22	0.73		27.04	110.	1.1320
818	4.25	34.35	0.33	3.25	700	4.58	34.29	0.46		27.18	96.	1.2353
1031	3.62	34.52	0.51	3.25	800	4.28	34.34	0.34		27.25	90.	1.3286
1572	2.61	34.62	1.20	3.09	1000	3.72	34.49	0.48		27.43	74.	1.4930
					1200	3.19	34.56	0.70		27.54	64.	1.6314
					1500	2.64	34.61	1.08		27.63	56.	1.8126

U. S. S. SERRANO; June 19, 1949; 2318 GCT; 31°41'N, 133°39'W; sounding, 2,450 fm; wind, 040°, force 2; weather, overcast; sea, slight; wire angle, 25°, 25°. 352

0	18.33	33.98	5.39u		0	18.33	33.98	5.39		24.43	351.	0.0000
24	18.02	33.95	5.31		10	18.33	33.97	5.33		24.42	352.	0.0352
48	15.87	33.88	5.63		20	18.33	33.96	5.31		24.42	353.	0.0705
95	15.18	33.98	5.53		30	17.60	33.94	5.37		24.58	338.	0.1051
192	10.97	33.67	4.79		50	15.85	33.88	5.63		24.94	304.	0.1693
289	8.25	34.01	3.39		75	15.46	33.95	5.59		25.08	291.	0.2437
387	6.75	33.96	1.92		100	15.00	33.98	5.51		25.21	280.	0.3151
486	5.74	34.17	0.97		150	13.00	33.80	5.18		25.48	254.	0.4487
536	5.32	34.21	0.76		200	10.72	33.69	4.65		25.83	222.	0.5678
555	5.26	34.13	0.73		250	9.18	33.89	3.92		26.24	183.	0.6692
606	4.88	34.17	0.62		300	8.07	34.01	3.19		26.51	158.	0.7546
658	4.72	34.16	0.49		400	6.60	34.01	1.78		26.71	139.	0.9035
709	4.58	34.33	0.36		500	5.62	34.18	0.90		26.98	115.	1.0308
762	4.38	34.33	0.33		600	4.90	34.17	0.64		27.05	108.	1.1425
813	4.23	34.40	0.34		700	4.60	34.31	0.38		27.20	95.	1.2443
1020	3.61	34.46	0.65		800	4.27	34.38	0.34		27.29	87.	1.3355
1554	2.60	34.55	1.35		1000	3.68	34.46	0.62		27.41	76.	1.4987
					1200	3.15	34.49	0.89		27.49	69.	1.6439
					1500	2.65	34.54	1.28		27.57	62.	1.8401

USNEL

CRUISE III

	OBSERVED					INTERPOLATED					COMPUTED		
	Z	T	S	O_2	PO_4-P	Z	T	S	O_2	PO_4-P	σ_t	δ	ΔD
	m	°C	‰	ml/L	μg at/L	m	°C	‰	ml/L	μg at/L	g/L	$10^5 cm^3/g$	dyn. m
353	U. S. S. SERRANO; June 20, 1949; 1517 GCT; 32°03'N, 130°16'W; sounding, 2,200 fm; wind, 030°, force 3; weather, cloudy; sea, slight; wire angle, 20°, 20°.												
	0	17.39	33.87	4.55	-	0	17.39	33.87	4.55		24.58	337.	0.0000
	25	17.41	33.85	5.07	0.35	10	17.40	33.86	4.79		24.57	338.	0.0338
	50	15.61	33.71	5.53	0.34	20	17.40	33.85	5.00		24.56	340.	0.0677
	100	14.69	33.75	5.46	0.36	30	17.41	33.82	5.22		24.53	342.	0.1018
	201	11.34	33.61	4.78	0.90	50	15.61	33.71	5.53		24.86	311.	0.1671
	303	8.38	34.01	3.32	1.77	75	15.00	33.72	5.50		25.01	298.	0.2433
	407	6.96	34.10	1.65	2.65	100	14.69	33.75	5.46		25.10	290.	0.3169
	512	5.98	34.18	0.92	2.87	150	13.49	33.68	5.22		25.29	273.	0.4577
	565	5.60	34.22	0.65	2.95	200	11.40	33.61	4.78		25.64	240.	0.5859
	599	5.40	34.23	0.61	2.97	250	9.71	33.86	4.11		26.09	198.	0.6953
	654	5.15	34.28	0.44	3.09	300	8.46	34.01	3.36		26.45	164.	0.7863
	709	4.88	34.33	0.36	3.15	400	7.03	34.09	1.76		26.72	139.	0.9380
	764	4.68	34.40	0.33	3.23	500	6.10	34.17	0.97		26.91	122.	1.0687
	820	4.50	34.42	0.33	3.27	600	5.40	34.23	0.60		27.04	110.	1.1847
	875	4.29	34.43	0.36	3.27	700	4.91	34.32	0.38		27.17	98.	1.2888
	1095	3.65	34.51	0.59	3.27	800	4.56	34.41	0.33		27.28	88.	1.3821
	1648	2.57	34.58	1.24	3.07	1000	3.87	34.48	0.47		27.41	77.	1.5473
						1200	3.40	34.53	0.69		27.49	69.	1.6933
						1500	2.74	34.56	1.01		27.58	61.	1.8889
354	U. S. S. SERRANO; June 20, 1949; 2318 GCT; 32°08'N, 129°17'W; sounding, 2,500 fm; wind, 320°, force 2; weather, overcast; sea, smooth; wire angle, 22°, 20°.												
	0	17.61	33.73			0	17.61	33.73			24.42	352.	0.0000
	25	17.43	33.71			10	17.59	33.72			24.41	353.	0.0353
	51	15.80	33.75			20	17.50	33.71			24.43	352.	0.0706
	104	15.00	33.79			30	17.40	33.71			24.45	350.	0.1057
	211	10.55	33.64			50	15.85	33.75			24.84	313.	0.1720
	316	8.27	33.91			75	15.45	33.78			24.94	303.	0.2491
	420	6.90	33.99			100	15.11	33.79			25.04	296.	0.3240
	522	5.91	34.08			150	12.75	33.72			25.47	256.	0.4619
	573	5.59	34.15			200	10.92	33.65			25.76	229.	0.5830
	574u	5.65u	34.13			250	9.59	33.77			26.08	199.	0.6898
	628	5.27	34.16			300	8.57	33.89			26.34	175.	0.7832
	680	4.99	34.22			400	7.16	33.98			26.61	149.	0.9452
	732	4.75	34.23			500	6.11	34.06			26.82	130.	1.0849
	786	4.60	34.25			600	5.43	34.15			26.97	116.	1.2082
	839	4.40	34.24			700	4.89	34.23			27.10	105.	1.3186
	1052	3.79	34.36			800	4.55	34.25			27.15	100.	1.4209
	1596	2.61	34.50			1000	3.94	34.33			27.28	89.	1.6097
						1200	3.44	34.41			27.39	78.	1.7769
						1500	2.78	34.51			27.54	65.	1.9923
355	U. S. S. SERRANO; June 21, 1949; 1540 GCT; 32°17.5'N, 126°18'W; sounding, 2,250 fm; wind, 030°, force 1; weather, overcast; sea, smooth; wire angle, 12°, 2°.												
	0	17.00	33.57		-	0	17.00	33.57			24.44	350.	0.0000
	25	17.00	33.48		0.48	10	17.00	33.53			24.41	353.	0.0352
	50	15.15	33.49		0.39	20	17.00	33.50			24.39	356.	0.0707
	100	14.01	33.47		0.40	30	17.00	33.48			24.37	358.	0.1064
	200	9.24	33.67		1.49	50	15.15	33.49			24.80	317.	0.1739
	300	7.76	33.97		1.92	75	14.53	33.48			24.93	306.	0.2518
	400	6.55	34.04		2.54	100	14.01	33.47			25.02	297.	0.3272
	500	5.36	34.08		2.68	150	10.70	33.56			25.73	230.	0.4591
	550	4.98	34.11		2.90	200	9.24	33.67			26.06	199.	0.5666
	564	5.01r	34.13		3.06	250	8.46	33.82			26.30	177.	0.6608
	616	4.73	34.16		3.08	300	7.76	33.97			26.52	157.	0.7443
	668	4.53	-		3.14	400	6.55	34.04			26.72	139.	0.8923
	720	4.41	34.22		3.10	500	5.36	34.08			26.93	120.	1.0216
	772	4.30	34.26		3.20	600	4.76	34.15			27.05	108.	1.1354
	823	4.20	34.33		3.18	700	4.46	34.21			27.13	101.	1.2400
	1030	3.65	34.46		3.26	800	4.26	34.30			27.22	93.	1.3370
	1548	2.63	-		-	1000	3.74	34.44			27.39	78.	1.5080
356						1200	3.20	-			-	-	-

U. S. S. SERRANO; June 21, 1949; 2316 GCT; 32°24'N, 125°12'W; sounding, 2,350 fm; wind, 010°, force 1; weather, cloudy; sea, smooth; wire angle, 13°, 12°. 356

OBSERVED Z m	OBSERVED T °C	OBSERVED S ‰	OBSERVED O_2 ml/L	OBSERVED PO_4-P μg at/L	INTERPOLATED Z m	INTERPOLATED T °C	INTERPOLATED S ‰	INTERPOLATED O_2 ml/L	INTERPOLATED PO_4-P μg at/L	COMPUTED σ_t g/L	COMPUTED δ $10^5 cm^3/g$	COMPUTED ΔD dyn. m
0	17.67	33.31			0	17.67	33.31			24.08	384.	0.0000
26	16.22	33.25			10	16.90	33.29			24.25	369.	0.0377
51	14.55	33.13			20	16.61	33.27			24.30	364.	0.0743
103	12.69	33.34			30	15.79	33.24			24.46	349.	0.1099
207	8.73	33.82			50	14.56	33.13			24.65	332.	0.1779
310	7.55	34.07			75	13.61	33.23			24.92	306.	0.2576
414	6.63	34.12			100	12.78	33.33			25.16	284.	0.3313
517	5.53	34.20			150	11.90	33.55			25.50	252.	0.4653
561	5.36	34.23			200	8.91	33.78			26.20	186.	0.5750
569	5.22r	34.22			250	8.16	33.97			26.46	162.	0.6620
613	4.94	34.24			300	7.65	34.06			26.61	149.	0.7396
664	4.99	34.30			400	6.78	34.12			26.78	134.	0.8809
716	4.65	34.34			500	5.66	34.18			26.97	116.	1.0053
768	4.54	34.36			600	5.00	34.24			27.09	104.	1.1153
818	4.39	34.41			700	4.70	34.33			27.20	95.	1.2150
1024	3.71	34.47			800	4.46	34.39			27.27	89.	1.3069
1543	2.71	34.52			1000	3.79	34.47			27.44	74.	1.4693
					1200	3.28	34.49			27.47	71.	1.6137
					1500	2.78	34.52			27.54	65.	1.8165

U. S. S. SERRANO; June 22, 1949; 1517 GCT; 32°35'N, 122°41.5'W; sounding, 2,350 fm; wind, 320°, force 1; weather, cloudy; sea, slight; wire angle, 25°, 25°. 357

OBSERVED Z m	OBSERVED T °C	OBSERVED S ‰	OBSERVED O_2 ml/L	OBSERVED PO_4-P μg at/L	INTERPOLATED Z m	INTERPOLATED T °C	INTERPOLATED S ‰	INTERPOLATED O_2 ml/L	INTERPOLATED PO_4-P μg at/L	COMPUTED σ_t g/L	COMPUTED δ $10^5 cm^3/g$	COMPUTED ΔD dyn. m
0	15.67	33.14	-		0	15.67	33.14			24.41	353.	0.0000
24	15.50	33.15	0.40		10	15.67	33.14			24.41	353.	0.0353
48	13.43	33.10	0.43		20	15.67	33.15			24.42	352.	0.0706
96	10.95	33.22	0.95		30	15.40	33.14			24.47	348.	0.1056
193	8.61	33.91	2.02		50	13.36	33.10			24.87	310.	0.1714
291	7.16	34.01	2.27		75	11.90	33.17			25.21	279.	0.2450
390	5.91	34.07	2.74		100	10.78	33.28			25.50	252.	0.3112
490	5.38	34.15	2.90		150	9.39	33.68			26.04	200.	0.4241
540	5.12	34.22	3.02		200	8.50	33.92			26.37	170.	0.5166
569	4.97	34.31	3.16		250	7.72	33.98			26.54	155.	0.5978
620	4.75	34.27	3.12		300	7.00	34.02			26.67	142.	0.6721
674	4.52	34.27	3.10		400	5.86	34.08			26.86	125.	0.8056
729	4.37	34.35	3.18		500	5.32	34.16			27.00	113.	0.9243
784	4.25	34.42	3.20		600	4.81	34.27			27.14	100.	1.0307
836	4.08	34.43	3.24		700	4.47	34.31			27.21	94.	1.1274
1052	3.61	34.51	3.16		800	4.20	34.43			27.33	83.	1.2155
1602	2.61	34.58	3.06		1000	3.71	34.49			27.43	74.	1.3723
					1200	3.22	34.53			27.51	67.	1.5137
					1500	2.70	34.57			27.59	60.	1.7045

U. S. S. SERRANO; June 22, 1949; 2317 GCT; 32°34'N, 121°39'W; sounding, 2,180 fm; wind, 310°, force 2; weather, partly cloudy; sea, slight; wire angle, 35°, 30°. 358

OBSERVED Z m	OBSERVED T °C	OBSERVED S ‰	OBSERVED O_2 ml/L	OBSERVED PO_4-P μg at/L	INTERPOLATED Z m	INTERPOLATED T °C	INTERPOLATED S ‰	INTERPOLATED O_2 ml/L	INTERPOLATED PO_4-P μg at/L	COMPUTED σ_t g/L	COMPUTED δ $10^5 cm^3/g$	COMPUTED ΔD dyn. m
0	16.11	33.18			0	16.11	33.18			24.35	359.	0.0000
24	15.37	33.19			10	15.94	33.18			24.38	356.	0.0357
47	13.01	33.20			20	15.67	33.19			24.45	349.	0.0710
95	11.06	33.15			30	15.06	33.19			24.59	337.	0.1053
192	8.53	33.93			50	12.90	33.20			25.04	294.	0.1684
289	7.16	34.04			75	12.38	33.17			25.12	287.	0.2411
388	6.06	34.05			100	10.81	33.15			25.39	262.	0.3097
486	5.75	34.18			150	9.08	33.56			26.00	204.	0.4262
519u	5.36r	34.22			200	8.44	33.95			26.41	167.	0.5190
535	5.55	34.24			250	7.76	34.02			26.56	152.	0.5987
569	5.22	34.30			300	7.01	34.04			26.68	141.	0.6721
620	4.88	34.31			400	5.99	34.06			26.83	128.	0.8064
671	4.82	34.32			500	5.72	34.19			26.97	116.	0.9281
724	4.71	34.37			600	5.00	34.30			27.14	100.	1.0360
778	4.52	34.34			700	4.78	34.34			27.20	95.	1.1335
996	3.94	-			800	4.47	(34.33)			(27.23)	(93.)	(1.2277)
					1000	(3.92)	-			-	-	-

POFI

CRUISE 1

OBSERVED				COMPUTED	INTERPOLATED				COMPUTED	
Z	T	S	O_2	σ_t	Z	T	S	σ_t	δ	ΔD
m	°C	‰	ml/L	g/L	m	°C	‰	g/L	$10^5 cm^3/g$	dyn. m
8-A	HUGH M. SMITH; December 14, 1949; 2210 GCT; 19°35'N, 156°11'W; sounding, missing; wind, 240°, force, 3 kt; weather, partly cloudy; sea, smooth; wire angle, 22°.									
0	-	34.72	3.08	-	0	(24.67)	34.72	(23.25)	(463.6)	0.0000
23	24.48	34.72	3.24	23.31	10	(24.59)	34.72	(23.27)	(461.7)	0.0463
46	24.45	34.74	3.25	23.33	20	(24.49)	34.72	(23.30)	(459.1)	0.0923
92	24.62	34.96	3.15	23.45	30	24.46	34.72	23.31	458.5	0.1382
184	18.86	34.92	2.82	25.01	50	24.45	34.75	23.34	457.0	0.2297
275	12.62	34.28	2.70	25.93	75	24.54	34.89	23.42	450.5	0.3433
368	8.54	34.14	1.86	26.53	100	24.64	34.96	23.44	449.4	0.4560
552	5.06	34.39	0.69	27.21	150	22.20	35.06	24.23	375.8	0.6632
923	4.25	34.45	0.75	27.34	200	18.38	34.87	25.10	294.1	0.8314
1390	2.96	34.57	1.10	27.57	250	14.38	34.42	25.68	239.0	0.9654
					300	11.26	34.20	26.12	196.3	1.0748
					400	7.45	34.17	26.72	139.3	1.2436
					500	5.51	34.36	27.13	100.6	1.3644
					600	4.90	34.40	27.23	91.1	1.4609
					700	4.66	34.42	27.28	87.8	1.5510
					800	4.48	34.43	27.30	85.8	1.6385
					1000	4.10	34.46	27.37	81.0	1.8068
8-B	HUGH M. SMITH; December 15, 1949; 2042 GCT; 19°14'N, 156°07'W; sounding, missing; wind, 100°, force, 1 kt; weather, clear; sea, slight; wire angle, 10°.									
0	-	34.65	3.08	-	0	(24.51)	34.65	(23.25)	(463.8)	0.0000
25	24.48	34.62	3.14	23.23	10	(24.50)	34.63	(23.24)	(465.5)	0.0465
49	24.48	34.68	3.19	23.28	20	(24.49)	34.62	(23.23)	(466.3)	0.0930
98	24.54	34.87	3.22	23.40	30	24.48	34.63	23.24	465.6	0.1396
195	16.04	34.58	2.74	25.43	50	24.48	34.69	23.28	462.2	0.2324
292	11.40	34.21	2.44	26.11	75	24.73	34.81	23.30	461.7	0.3480
390	7.96	34.14	1.58	26.63	100	24.51	34.87	23.41	452.0	0.4625
585	5.54	34.29	0.60	27.07	150	18.64	34.80	24.98	303.9	0.6522
781	4.70	34.45	0.66	27.29	200	15.82	34.56	25.47	258.0	0.7934
					250	13.05	34.32	25.88	219.7	0.9134
					300	11.15	34.20	26.14	194.4	1.0175
					400	7.71	34.14	26.66	145.4	1.1884
					500	6.17	34.22	26.94	119.3	1.3217
					600	5.47	34.30	27.09	105.7	1.4350
					700	5.05	34.39	27.21	94.7	1.5359
					800	(4.63)	(34.46)	(27.30)	(85.6)	(1.6268)
					1000	(3.98)	(34.52)	(27.43)	(75.2)	(1.7891)
1	HUGH M. SMITH; December 17, 1949; 2313 GCT; 18°50'N, 155°49'W; sounding, missing; wind, 100°, force, 4 kt; weather, partly cloudy; sea, moderate; wire angle, 42°.									
0	-	34.42	4.84	-	0	(24.51)	34.42	(23.05)	(482.3)	0.0000
18	24.42	34.42	4.80	23.10	10	(24.48)	34.42	(23.08)	(480.0)	0.0481
36	24.52	34.70	4.82	23.28	20	24.45	34.42	23.09	479.5	0.0961
70	24.41	34.79	4.84	23.38	30	24.50	34.58	23.20	469.8	0.1436
133	19.70	34.89	4.84	24.77	50	24.46	34.74	23.33	457.9	0.2363
193	16.20	34.55	4.01	25.37	75	24.42	34.80	23.38	453.6	0.3504
253	12.09	34.18	3.88	25.96	100	24.12	34.86	23.52	441.4	0.4625
374	8.73	34.14	2.40	26.51	150	18.95	34.82	24.91	309.9	0.6511
497	6.75	34.11	1.57	26.77	200	16.05	34.53	25.40	265.0	0.7955
623	5.94	34.20	0.86	26.95	250	12.42	34.20	25.91	216.3	0.9164
					300	10.49	34.16	26.23	185.9	1.0176
					400	8.24	34.13	26.57	154.0	1.1885
					500	6.70	34.11	26.78	134.5	1.3337
					600	6.03	34.18	26.92	121.6	1.4627
					700	(5.69)	(34.24)	(27.01)	(114.0)	(1.5814)
					800	(5.41)	(34.30)	(27.09)	(107.3)	(1.6929)
					1000	(5.03)	(34.40)	(27.22)	(96.9)	(1.8990)

OBSERVED				COMPUTED	INTERPOLATED			COMPUTED		
Z	T	S	O_2	σ_t	Z	T	S	σ_t	δ	ΔD
m	°C	‰	ml/L	g/L	m	°C	‰	g/L	$10^5 cm^3/g$	dyn. m

HUGH M. SMITH; December 18, 1949; 0438 GCT; 18°32'N, 156°15'W; sounding, missing; wind, 130°, force, 4 kt; weather, partly cloudy; sea, moderate; wire angle, 45°. 2

0	-	34.40	4.70	-	0	(24.71)	34.40	(23.00)	(487.7)	0.0000
18	24.66	34.32	4.80	22.95	10	(24.68)	34.33	(22.95)	(492.1)	0.0490
36	24.63	34.35	4.87	22.98	20	24.66	34.32	22.95	492.6	0.0982
70	22.14	34.70	5.10	23.97	30	24.64	34.34	22.97	491.1	0.1474
137	18.98	34.61	4.98	24.74	50	24.58	34.40	23.04	485.9	0.2451
204	15.17	34.43	3.82	25.52	75	21.92	34.70	24.03	391.7	0.3549
271	10.56	34.22	3.35	26.26	100	21.02	34.68	24.26	370.5	0.4504
407	7.50	34.14	1.85	26.69	150	18.47	34.58	24.85	315.5	0.6226
545	5.94	34.29	0.95	27.02	200	15.90	34.47	25.38	266.2	0.7687
687	5.30	34.33	0.98	27.13	250	11.99	34.28	26.05	202.3	0.8864
1052	3.90	34.51	1.52	27.43	300	9.67	34.18	26.39	170.7	0.9802
					400	7.62	34.14	26.67	144.1	1.1386
					500	6.39	34.24	26.92	120.7	1.2718
					600	5.65	34.31	27.07	107.3	1.3866
					700	5.24	34.34	27.15	100.9	1.4915
					800	4.83	34.38	27.23	93.8	1.5897
					1000	4.10	34.48	27.38	79.5	1.7645

HUGH M. SMITH; December 18, 1949; 0915 GCT; 18°16'N, 156°39'W; sounding, missing; wind, 100°, force, 3 kt; weather, partly cloudy; sea, moderate; wire angle, 0°. 3

0	-	35.07	4.87	-	0	(24.30)	35.07	(23.63)	(427.7)	0.0000
25	24.23	35.08	4.82	23.65	10	(24.29)	35.08	(23.64)	(427.0)	0.0427
50	24.26	35.05	4.72	23.62	20	(24.27)	35.08	(23.64)	(426.9)	0.0854
100	21.01	35.06	4.62	24.55	30	24.27	35.08	23.64	427.2	0.1281
199	18.39	34.93	4.42	25.14	50	24.28	35.05	23.62	430.3	0.2139
298	10.93	34.14	3.68	26.14	75	22.56	35.08	24.14	381.3	0.3154
398	7.72	34.11	2.23	26.63	100	21.03	35.06	24.55	343.4	0.4062
597	5.70	34.29	0.88	27.05	150	20.07	35.04	24.79	321.8	0.5732
796	4.73	34.44	1.01	27.28	200	18.38	34.93	25.14	389.8	0.7268
995	4.10	34.46	1.16	27.37	250	14.45	34.50	25.72	234.7	0.8586
1493	2.75	34.52	1.74	27.54	300	10.79	34.14	26.16	192.4	0.9660
					400	7.68	34.11	26.69	147.2	1.1368
					500	6.54	34.20	26.87	125.6	1.2741
					600	5.68	34.30	27.06	108.2	1.3918
					700	5.13	34.40	27.21	95.0	1.4942
					800	4.68	34.44	27.29	87.6	1.5863
					1000	4.08	34.46	27.37	80.8	1.7562

HUGH M. SMITH; December 18, 1949; 1435 GCT; 17°56'N, 157°06'W; sounding, missing; wind, 110°, force, 3 kt; weather, cloudy; sea, moderate; wire angle, 5°. 4

0	-	35.09	4.80	-	0	(24.24)	35.09	(23.66)	(424.6)	0.0000
24	24.23	35.06	4.82	23.64	10	(24.24)	35.07	(23.64)	(426.4)	0.0426
49	24.28	35.07	4.82	23.63	20	(24.23)	35.06	(23.64)	(427.1)	0.0852
98	21.71	35.08	4.72	24.38	30	24.24	35.06	23.64	427.8	0.1280
196	18.69	34.95	4.54	25.08	50	24.26	35.07	23.64	428.4	0.2136
295	11.00	34.20	3.66	26.17	75	23.75	35.08	23.80	414.2	0.3190
394	8.04	34.33r	1.62	26.76	100	21.68	35.08	24.39	358.6	0.4158
591	5.79	34.35	0.98	27.09	150	20.07	35.03	24.78	322.4	0.5868
790	4.90	34.47	0.96	27.29	200	18.62	34.94	25.09	294.9	0.7418
988	4.19	34.48	1.57	27.38	250	14.90	34.55	25.67	240.4	0.8764
1488	2.82	34.57	1.88	27.58	300	10.72	34.18	26.21	188.3	0.9841
					400	7.90	34.11	26.61	150.2	1.1544
					500	6.60	34.21	26.87	125.7	1.2933
					600	5.72	34.37	27.11	103.8	1.4088
					700	5.22	34.45	27.23	92.6	1.5078
					800	4.85	34.47	27.30	87.4	1.5985
					1000	4.16	34.48	27.38	80.2	1.7676

POF I

CRUISE 1

OBSERVED				COMPUTED	INTERPOLATED			COMPUTED	
Z	T	S	O_2	σ_t	Z	T	S	σ_t	δ	ΔD
m	°C	‰	ml/L	g/L	m	°C	‰	g/L	10^{-5} cm^3/g	dyn. m
5	HUGH M. SMITH; December 18, 1949; 1920 GCT; 18°20'N, 157°23'W; sounding, missing; wind, 120°, force, 3 kt; weather, partly cloudy; sea, moderate; wire angle, 15°.									
0	-	35.12	4.82	-	0	(24.16)	35.12	(23.71)	(420.1)	0.0000
24	24.18	35.05	4.80	23.65	10	(24.16)	35.09	(23.68)	(422.5)	0.0421
47	24.14	35.03	4.84	23.64	20	(24.17)	35.06	(23.66)	(426.9)	0.0846
94	23.22	35.15	4.86	24.00	30	24.16	35.04	23.65	426.9	0.1273
186	18.96	34.96	4.47	25.02	50	24.14	35.03	23.64	427.9	0.2128
279	11.54	34.19	3.96	26.06	75	24.11	35.10	23.70	423.2	0.3192
372	8.30	34.11	1.16	26.55	100	22.85	35.15	24.11	384.9	0.4205
557	5.77	34.34	0.80	27.08	150	20.54	35.07	24.69	331.6	0.6003
744	5.16	34.45	0.86	27.24	200	18.14	34.89	25.17	286.8	0.7557
932	4.34	34.50	1.18	27.37	250	14.13	34.46	25.76	231.0	0.8858
1408	3.04	34.56	1.62	27.55	300	10.34	34.14	26.24	184.9	0.9904
					400	7.76	34.11	26.63	148.2	1.1579
					500	6.27	34.35	27.03	111.1	1.2884
					600	5.56	34.38	27.14	101.0	1.3952
					700	5.27	34.43	27.21	94.5	1.4937
					800	4.98	34.47	27.28	88.9	1.5861
					1000	4.13	34.51	27.40	77.6	1.7541
6	HUGH M. SMITH; December 19, 1949; 0057 GCT; 18°41'N, 156°54'W; sounding, missing; wind, 100°, force, 3 kt; weather, rain showers; sea, missing; wire angle, 5°.									
0	-	35.07	4.78	-	0	(24.52)	35.07	(23.56)	(433.9)	0.0000
25	24.31	35.08	4.82	23.63	10	(24.43)	35.07	(23.57)	(431.8)	0.0432
50	23.43	35.13	4.90	23.93	20	(24.39)	35.08	(23.60)	(430.3)	0.0863
99	20.54	35.07	-	24.69	30	24.34	35.09	23.63	428.5	0.1293
198	14.28	34.49	4.28	25.75	50	23.33	35.13	23.96	397.9	0.2120
297	10.70	34.19	3.54	26.22	75	21.63	35.11	24.42	354.4	0.3061
396	8.12	34.19	2.18	26.64	100	20.54	35.07	24.69	329.7	0.3918
593	5.95	34.36	-	27.08	150	18.26	34.90	25.15	287.4	0.5467
791	4.82	34.45	0.94	27.28	200	14.20	34.48	25.76	229.6	0.6766
989	4.04	34.51	1.20	27.41	250	11.61	34.26	26.11	197.3	0.7838
1484	2.76	34.56	1.74	27.58	300	10.65	34.19	26.23	186.5	0.8803
					400	8.02	34.20	26.66	145.2	1.0472
					500	6.77	34.30	26.92	121.4	1.1814
					600	5.88	34.37	27.09	105.8	1.2958
					700	5.33	34.41	27.19	96.9	1.3979
					800	4.79	34.45	27.29	88.1	1.4911
					1000	4.01	34.51	27.42	76.3	1.6570
7	HUGH M. SMITH; December 19, 1949; 0620, 0703 GCT; 18°55'N, 156°36'W; sounding, missing; wind, 010°, force, 2 kt; weather, missing; sea, missing; wire angle, 23°, 45°.									
0	-	34.27	4.84	-	0	(24.80)	34.27	(22.87)	(499.7)	0.0000
22	24.78	34.42	4.78	22.99	10	(24.80)	34.37	(22.95)	(492.9)	0.0496
45	24.62	34.43	4.74	23.04	20	(24.76)	34.42	(23.00)	(488.3)	0.0987
89	21.81	34.90	5.19	24.21	30	24.71	34.42	23.00	487.4	0.1475
177	18.06	34.88	4.54	25.18	50	24.59	34.44	23.06	483.2	0.2445
266	11.60r	34.17	2.28r	26.04	75	22.60	34.84	23.95	399.7	0.3550
					100	21.63	34.90	24.26	370.4	0.4515
241	11.80r	34.17r	3.83	26.00	150	19.37	34.92	24.88	312.9	0.6230
365	7.77	34.33r	2.25	26.80	200	16.38	34.74	25.48	257.3	0.7662
493	5.73	34.29	0.95	27.05	250	11.83	34.19	26.01	206.2	0.8827
626	5.00	34.43	1.39	27.25	300	9.90	34.14	26.32	177.5	0.9792
1128	3.55	34.55	1.41	27.49	400	7.05	34.16	26.77	134.3	1.1360
					500	5.63	34.30	27.07	106.5	1.2572
					600	5.07	34.42	27.23	92.5	1.3574
					700	4.75	34.46	27.30	85.9	1.4473
					800	4.38	34.50	27.37	79.6	1.5307
					1000	3.74	34.54	27.47	71.0	1.6826

HUGH M. SMITH; December 19, 1949; 1235 GCT; 19°15'N, 156°06'W; sounding, missing; wind, 280°, force, 0 kt; weather, overcast; sea, smooth; wire angle, 7°. 8

OBSERVED				COMPUTED	INTERPOLATED				COMPUTED	
Z	T	S	O_2	σ_t	Z	T	S	σ_t	δ	ΔD
m	°C	‰	ml/L	g/L	m	°C	‰	g/L	$10^5 cm^3/g$	dyn. m
0	-	34.84	4.90	-	0	(24.70)	34.84	(23.33)	(455.7)	0.0000
25	24.64	34.83	4.82	23.34	10	(24.68)	34.83	(23.33)	(456.2)	0.0456
50	24.68	34.92	4.80	23.40	20	(24.66)	34.83	(23.34)	(455.9)	0.0912
99	24.12	35.07	4.84	23.68	30	24.66	34.84	23.35	455.5	0.1368
196	17.35	34.63	4.20	25.16	50	24.68	34.92	23.40	451.2	0.2274
293	11.18	34.18	3.74	26.13	75	24.52	35.01	23.51	441.4	0.3391
390	7.80	34.11	2.66	26.62	100	24.09	35.07	23.69	425.5	0.4477
585	5.50	34.32	0.90	27.10	150	19.91	34.87	24.70	330.0	0.6374
781	4.60	34.43	1.08	27.29	200	16.88	34.60	25.25	278.8	0.7903
977	4.06	34.52	1.26	27.42	250	13.83	34.35	25.74	233.2	0.9190
1474	2.80	34.61	1.76	27.61	300	10.81	34.17	26.18	190.6	1.0255
					400	7.63	34.11	26.65	146.3	1.1950
					500	6.33	34.22	26.91	121.4	1.3297
					600	5.38	34.33	27.12	102.4	1.4424
					700	4.87	34.39	27.23	92.4	1.5405
					800	4.51	34.45	27.32	84.8	1.6298
					1000	3.98	34.53	27.44	74.4	1.7905

HUGH M. SMITH; December 19, 1949; 2016 GCT; 19°41'N, 156°20'W; sounding, missing; wind, 310°, force, 1 kt; weather, partly cloudy; sea, smooth; wire angle, 15°. 9

OBSERVED				COMPUTED	INTERPOLATED				COMPUTED	
Z	T	S	O_2	σ_t	Z	T	S	σ_t	δ	ΔD
m	°C	‰	ml/L	g/L	m	°C	‰	g/L	$10^5 cm^3/g$	dyn. m
0	-	34.72	4.86	-	0	(24.59)	34.72	(23.28)	(461.3)	0.0000
24	24.50	34.69	4.84	23.28	10	(24.52)	34.70	(23.28)	(461.0)	0.0461
48	24.52	34.75	4.85	23.32	20	(24.51)	34.69	(23.28)	(461.7)	0.0923
95	24.51	34.86	4.82	23.40	30	24.50	34.70	23.29	461.2	0.1384
188	17.26	34.78	4.20	25.30	50	24.50	34.75	23.32	458.4	0.2304
281	11.92	34.23	4.03	26.03	75	24.50	34.81	23.37	455.0	0.3446
373	7.79 / 7.93 a)	34.11	2.84	26.63 / 26.61 a)	100	24.45	34.87	23.43	450.2	0.4580
					150	20.23	34.94	24.67	333.0	0.6546
558	5.60	34.23	1.04	27.01	200	17.06	34.76	25.33	271.3	0.8064
744	4.84 / 4.58 a)	34.40	1.01	27.24 / 27.27 a)	250	13.53	34.37	25.82	225.7	0.9313
					300	11.12	34.18	26.14	195.3	1.0372
932	3.95 / 4.15 a)	34.49	1.18	27.41 / 27.39 a)	400	7.46	34.12	26.68	143.1	1.2074
					500	6.25	34.18	26.90	123.2	1.3414
1409	3.00	34.55	1.62	27.55	600	5.35	34.27	27.08	106.4	1.4570
					700	4.87	34.36	27.21	94.7	1.5583
					800	4.50	34.43	27.30	86.2	1.6495
					1000	3.82	34.51	27.43	74.2	1.8114

HUGH M. SMITH; December 20, 1949; 0153, 0300 GCT; 19°21'N, 156°46'W; sounding, missing; wind, 350°, force, 2 kt; weather, partly cloudy; sea, smooth; wire angle, 32°, 45°. 10

OBSERVED				COMPUTED	INTERPOLATED				COMPUTED	
Z	T	S	O_2	σ_t	Z	T	S	σ_t	δ	ΔD
m	°C	‰	ml/L	g/L	m	°C	‰	g/L	$10^5 cm^3/g$	dyn. m
0	-	34.40	4.90	-	0	(24.89)	34.40	(22.94)	(492.9)	0.0000
20	24.66	34.38	4.82	23.00	10	(24.71)	34.39	(22.99)	(488.8)	0.0491
41	24.66	34.38	4.86	23.00	20	24.66	34.38	23.00	488.3	0.0979
82	23.03	34.84	5.10	23.82	30	24.66	34.38	23.00	488.8	0.1468
164	19.02	34.93	4.42	24.98	50	24.66	34.41	23.02	487.4	0.2444
					75	24.50	34.80	23.36	455.8	0.3624
233	23.16 / 23.03 b)	34.33 b)	4.52 b)	23.40 / 23.44 b)	100	21.59	34.92	24.29	367.9	0.4656
					150	19.45	34.93	24.87	314.2	0.6368
313	9.92	34.17	3.48	26.34	200	17.47	34.81	25.27	277.1	0.7854
473	7.05	34.20	1.49	26.80	250	14.28	34.45	25.72	234.9	0.9140
637	5.34	34.45	1.00	27.22	300	10.75	34.18	26.20	188.8	1.0206
802	4.76	34.46	1.26	27.30	400	8.13	34.17	26.62	149.1	1.1905
1231	3.48	34.53	1.52	27.48	500	6.76	34.23	26.87	126.5	1.3292
					600	5.61	34.41	27.16	99.5	1.4430
					700	5.06	34.45	27.26	90.3	1.5386
					800	4.74	34.46	27.30	86.9	1.6280
					1000	4.07	34.50	27.40	77.7	1.7940

a) Average of these two values was accepted.
b) Bottle apparently closed on the way down.

POFI

CRUISE 1

11 HUGH M. SMITH; December 20, 1949; 0817 GCT; 19°04'N, 157°13'W; sounding, missing; wind, 020°, force, 2 kt; weather, partly cloudy; sea, smooth; wire angle, 8°.

OBSERVED					INTERPOLATED				COMPUTED	
Z m	T °C	S ‰	O_2 ml/L	σ_t g/L	Z m	T °C	S ‰	σ_t g/L	δ 10^{-5} cm^3/g	ΔD dyn. m
0	-	34.96	4.96	-	0	(24.00)	34.96	(23.63)	(427.2)	0.0000
24	23.99	35.13	4.88	23.76	10	(24.00)	35.08	(23.72)	(419.0)	0.0423
48	23.89	35.13	4.82	23.79	20	(23.99)	35.13	(23.76)	(415.3)	0.0840
96	20.99	35.10	4.74	24.59	30	23.98	35.13	23.76	415.4	0.1256
191	17.10	34.73	4.36	25.30	50	23.86	35.13	23.80	412.7	0.2084
287	10.96	34.20	3.73	26.18	75	21.76	35.12	24.39	357.0	0.3047
383	8.07	34.18	1.68	26.64	100	20.82	35.10	24.63	335.0	0.3914
574	5.72	34.31	0.90	27.06	150	18.94	34.93	25.00	301.6	0.5512
765	4.66 4.82 } a)	34.42	0.88	27.28 27.26 } a)	200	16.83	34.70	25.34	270.2	0.6948
					250	12.80	34.31	25.92	215.6	0.8169
957	4.05	34.49	1.18	27.40	300	10.22	34.18	26.30	179.9	0.9163
1439	2.81	34.56	1.67	27.57	400	7.78	34.18	26.68	143.1	1.0788
					500	6.42	34.26	26.93	119.6	1.2110
					600	5.53	34.34	27.11	103.5	1.3233
					700	4.98	34.40	27.23	93.0	1.4223
					800	4.57	34.45	27.31	85.6	1.5124
					1000	3.92	34.50	27.42	76.1	1.6755

12 HUGH M. SMITH; December 20, 1949; 1335 GCT; 18°45'N, 157°36'W; sounding, missing; wind, 060°, force, 1 kt; weather, partly cloudy; sea, smooth; wire angle, 35°.

0	-	-	-	-	0	(24.16)	(35.01)	(23.62)	(428.0)	0.0000
20	24.17	35.01	4.80	23.62	10	(24.15)	(35.01)	(23.63)	(428.2)	0.0428
41	24.19	35.05	4.82	23.64	20	24.15	35.01	23.63	428.4	0.0856
80	24.06	35.05	4.82	23.68	30	24.15	35.03	23.64	427.4	0.1284
157	20.58	35.11	4.82	24.71	50	24.14	35.05	23.66	426.7	0.2138
230	14.07	34.35	4.10	25.69	75	24.08	35.05	23.68	425.8	0.3205
304	10.04	34.18	3.66	26.33	100	23.91	35.07	23.74	420.5	0.4265
451	7.42	34.13	2.10	26.70	150	20.85	35.11	24.64	336.7	0.6166
598	5.75	34.32	1.01	27.07	200	18.03	34.84	25.16	287.8	0.7735
746	5.12	34.43	1.06	27.23	250	12.56	34.26	25.93	214.7	0.8997
1114	3.71	34.51	1.36	27.45	300	10.22	34.18	26.30	179.7	0.9989
					400	8.05	34.13	26.60	150.9	1.1652
					500	6.85	34.17	26.81	132.2	1.3077
					600	5.75	34.32	27.07	107.9	1.4286
					700	5.27	34.41	27.20	95.9	1.5312
					800	4.92	34.45	27.27	89.7	1.6248
					1000	4.09	34.50	27.40	77.8	1.7938

13 HUGH M. SMITH; December 20, 1949; 1855 GCT; 19°14'N, 157°46'W; sounding, missing; wind, missing, force, 1 kt; weather, partly cloudy; sea, smooth; wire angle, 14°.

0	-	34.97	5.00	-	0	(24.76)	34.97	(23.41)	(448.1)	0.0000
24	24.56	34.92	4.80	23.43	10	(24.67)	34.94	(23.41)	(448.2)	0.0448
47	24.56	34.98	4.74	23.48	20	(24.56)	34.92	(23.43)	(446.6)	0.0896
95	24.18	35.10	4.85	23.69	30	24.55	34.93	23.45	446.0	0.1342
189	19.30	34.96	4.26	24.93	50	24.53	34.99	23.49	442.1	0.2230
283	11.89	34.18	3.81	26.00	75	24.38	35.05	23.59	434.3	0.3326
377	8.90	34.14	3.10	26.48	100	24.07	35.11	23.73	422.0	0.4399
565	5.98	34.28	1.01	27.01	150	21.08	35.10	24.57	343.4	0.6320
754	4.98	34.41	0.98	27.23	200	18.90	34.93	25.01	302.3	0.7942
944	4.28	34.50	1.14	27.38	250	16.20	34.62	25.43	263.3	0.9364
1419	2.98	34.56	1.62	27.56	300	11.13	34.16	26.12	197.0	1.0521
					400	8.41	34.14	26.56	155.8	1.2296
					500	6.78	34.18	26.83	130.2	1.3735
					600	5.66	34.32	27.08	106.6	1.4927
					700	5.20	34.38	27.18	97.4	1.5955
					800	4.79	34.44	27.28	88.8	1.6894
					1000	4.09	34.51	27.41	77.1	1.8568

a) Average of these two values was accepted.

OBSERVED				COMPUTED	INTERPOLATED				COMPUTED		
Z	T	S	O_2	σ_t	Z	T	S	σ_t	δ	ΔD	
m	°C	‰	ml/L	g/L	m	°C	‰	g/L	$10^5 cm^3/g$	dyn. m	
HUGH M. SMITH; December 20, 1949; 2255, 2330 GCT; 19°26'N, 157°34'W; sounding, missing; wind, 020°, force, 0 kt; weather, partly cloudy; sea, smooth; wire angle, 45°, missing.											14
0	-	34.95	4.86	-	0	(24.59)	34.95	(23.45)	(444.7)	0.0000	
18	24.39	34.99	5.04	23.54	10	(24.43)	34.96	(23.51)	(439.6)	0.0442	
35	24.12	35.11	4.86	23.71	20	24.37	35.00	23.55	435.6	0.0880	
69	24.08	35.13	4.70	23.74	30	24.19	35.09	23.67	424.3	0.1310	
136	21.54	35.12	4.62	24.45	50	24.10	35.12	23.72	420.3	0.2154	
					75	24.09	35.13	23.74	420.1	0.3206	
201	19.09	35.01	4.62	25.02	100	23.94	35.13	23.78	416.9	0.4254	
280	12.32	34.25	3.52	25.96	150	20.95	35.11	24.61	339.4	0.6153	
401	8.33	35.02r	2.23	27.26	200	19.14	35.01	25.01	302.5	0.7765	
538	6.20	34.22	1.08	26.93	250	16.40	34.63	25.39	267.3	0.9197	
681	5.06	34.34	0.90	27.17	300	11.18	34.20	26.14	195.0	1.0359	
1061	3.86	34.51	1.31	27.43	400	8.37	34.13	26.56	155.6	1.2123	
					500	6.62	34.19	26.85	127.6	1.3548	
					600	5.63	34.27	27.04	110.1	1.4745	
					700	4.97	34.36	27.20	95.8	1.5782	
					800	4.58	34.42	27.29	87.8	1.6708	
					1000	3.98	34.50	27.41	76.6	1.8367	
HUGH M. SMITH; December 21, 1949; 0555 GCT; 19°36'N, 157°06'W; sounding, missing; wind, 320°, force, 2 kt; weather, partly cloudy; sea, smooth; wire angle, missing.											15
0	-	34.43	4.82	-	0	(24.80)	34.43	(22.99)	(488.2)	0.0000	
25	24.67	34.38	4.84	22.99	10	(24.74)	34.39	(22.98)	(489.7)	0.0489	
50	24.70	-	4.80	-	20	(24.70)	34.38	(22.98)	(489.5)	0.0979	
99	22.78	34.81	5.15	23.87	30	24.68	34.39	23.00	488.7	0.1468	
196	18.06	34.80	4.32	25.12	50	24.68	34.50	23.08	481.5	0.2438	
292	11.03	34.21	3.52	26.17	75	24.68	34.67	23.21	470.3	0.3629	
387	8.53	34.19	2.42	26.58	100	22.68	34.81	23.90	404.9	0.4725	
579	5.67	34.30	1.04	27.06	150	20.08	34.92	24.70	330.6	0.6571	
770	4.57	34.45	0.88	27.31	200	17.99	34.79	25.13	290.6	0.8132	
962	3.95	34.51	1.23	27.42	250	13.92	34.36	25.73	234.2	0.9451	
1445	2.80	34.53	2.00	27.55	300	10.78	34.20	26.21	187.9	1.0512	
					400	8.27	34.19	26.62	149.7	1.2210	
					500	6.68	34.22	26.87	126.1	1.3598	
					600	5.51	34.32	27.10	104.9	1.4761	
					700	4.90	34.41	27.24	91.4	1.5750	
					800	4.43	34.46	27.33	83.1	1.6630	
					1000	3.80	34.52	27.45	73.2	1.8207	
HUGH M. SMITH; December 21, 1949; 1312 GCT; 20°07'N, 156°25'W; sounding, missing; wind, 330°, force, 3 kt; weather, clear; sea, slight; wire angle, 55°.											16
0	-	34.60	4.90	-	0	(24.34)	34.60	(23.26)	(462.7)	0.0000	
15	24.33	34.53	4.85	23.21	10	(24.32)	34.54	(23.22)	(466.7)	0.0465	
30	24.32	34.69	4.78	23.33	20	24.32	34.54	23.22	467.0	0.0932	
56	23.33	35.03	4.84	23.88	30	24.30	34.69	23.34	456.1	0.1393	
106	21.86	35.17	4.90	24.40	50	24.29	35.00	23.58	434.1	0.2283	
156	20.32	35.12	4.59	24.79	75	24.08	35.08	23.70	423.7	0.3356	
206	18.13	34.85	5.38	25.15	100	22.50	35.16	24.22	374.8	0.4357	
314	10.89	34.20	3.73	26.19	150	20.39	35.13	24.77	323.4	0.6109	
425	7.56	34.17	2.26	26.71	200	18.52	34.91	25.09	294.4	0.7661	
544	6.18	34.23	1.04	26.94	250	15.62	34.54	25.50	256.5	0.9046	
871	4.40	34.43	1.21	27.31	300	11.62	34.22	26.07	201.6	1.0197	
					400	7.95	34.17	26.65	146.5	1.1948	
					500	6.61	34.20	26.86	126.7	1.3323	
					600	5.77	34.28	27.03	110.9	1.4520	
					700	5.18	34.35	27.16	99.3	1.5579	
					800	4.68	34.41	27.27	89.8	1.6532	
					1000	(4.00)	(34.48)	(27.39)	(78.3)	(1.8228)	

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